



Department of Energy

Ohio Field Office Fernald Area Office

P. O. Box 538705
Cincinnati, Ohio 45253-8705
(513) 648-3155



2235

MAY 12 1999

Mr. James A. Saric, Remedial Project Manager
U.S. Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0710-99

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF VARIANCES TO PROJECT SPECIFIC PLANS

This letter transmits for your records, variances for Project Specific Plans (PSP) issued during the months of February through April, 1999.

If you have any questions or comments regarding these variances, please contact Kathleen Nickel at (513) 648-3166.

Sincerely,

FEMP:Nickel

Johnny W. Reising
Fernald Remedial Action
Project Manager

Enclosures

2235

Mr. James A. Saric
Mr. Tom Schneider

-2-

cc w/enclosures:

T. Schneider, OEPA-Dayton (three copies of enclosures)

F. Barker, Tetra Tech

AR Coordinator, FDF/78

cc w/o enclosures:

ECDC, FDF/52-7

Mr. James A. Saric
Mr. Tom Schneider

-3-

- - 2235

bcc w/enclosures:
R. J. Janke, OH/FEMP
M. Davis, ANL

VARIANCE / FIELD CHANGE NOTICE

V/F 50.03.75.02-1

WBS NO.: 50.03.75.02

Page 1 of 2PROJECT TITLE: PSP for Area 9 Phase I Pre-Certification Real-Time Scanning
(20702-PSP-0001), Revision 4Date: 3/8/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

Field Change Notice:

2235

This Variance documents the Revised Figure 1-1, which should be added as a change page to the PSP for A9PI Precertification Real-Time Scanning. The Figure was modified to show a small area north of the total uranium concentration that failed certification in A1PI (in CU O20). As discussed in the PSP, this area will be included in the Certification of A9PI, but not in precertification.

Justification:

The change to this PSP was made per Ohio EPA comment #1 on Rev. 3 of this PSP, as shown below:

Commenting Organization: Ohio EPA

Commentor: OFFO

Section #: 1.3 Pg #: 1-4 Line #: First Paragraph Code: C

Original Comment #: 1

Comment: This section references part of A1PI that is going to be included in the A9PI certification. Even though it is not part of this precertification scanning, this area should be identified on Figure 1-1 for reference. Please add this location.

Response: Agree.

Action: This area will be added to Figure 1-1.

INFORMATION
ONLY

REQUESTED BY: Ohio EPA

Date: 2/26/99

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>R. Hinkle</i>	3-10-99	X	PROJECT MANAGER <i>W. E. Edwards</i>	3/8/99
	DATA QUALITY MANAGEMENT		X	CHARACTERIZATION LEAD <i>Eric Kroger</i>	3/8/99
	ANALYTICAL CUSTOMER SUPPORT		X	REAL TIME PROGRAM MANAGER <i>John Hinkle</i>	3/10/99
	OTHER			OTHER	

VARIANCE/FCN APPROVED [X] YES [] NO REVISION REQUIRED: [] YES [X] NO

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PROJECT MANAGER:	DOCUMENT CONTROL:	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

4

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DRAFT

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TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL

166196
DRAG8938

To: NICKEL, K.A.

Date: 04/22/99

Control No: **INFO**

Location/Mail Stop: 45

From: ECDC

FOLLOW INSTRUCTIONS BELOW

VARIANCE ON PSP 21100-PSP-0002 R/0

Project	CWO	Document No	Rev	Title of Document	Comments
21100 VARIANCE		21100-PSP-0002-02	0	PSP FOR AREA 8, PHASE II AND AREA 6 TRIANGLE AREA CERTIFICATION SAMPLING AND DRAINAGE DITCH INVESTIGATION	

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VARIANCE / FIELD CHANGE NOTICE

V/F 21100-PSP-0002-2

WBS NO.: 21100-PSP-0002.Rev 0

Page 1 of 1

PROJECT TITLE: PSP for A8P2 & A6TA Certification and Drainage Ditch Investigation

Date: 4/19/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

Justification

1- Five (5) HPGe measurement locations were moved because they were inaccessible to the HPGe system. The original locations were either excessively low and wet or in a debris area. The physical samples will still be collected at the original locations as identified in the Certification Design Letter for A8P2 and A6TA.

2- A "mock" validation of the HPGe data will be performed to test the draft ASL D validation process. The mock validation will test the draft data procedure 34-00-005 In-Situ Gamma Spectrometry Data Validation, and the validation database links to the SED.

3- Clarify the HPGe duplicate measurements to indicate they are to be non-consecutive duplicates. The HPGe ASL D validation checklist calls for non-consecutive duplicates. Historically, all HPGe duplicates have been consecutive.

Field Change Notice

1- The following HPGe locations were moved from their identified locations in Figure 2-1 to these new coordinates:

LOCATION	NORTH	EAST
A8P2-01-C-1-G	483210.30	1345170.93
A8P2-01-C-4-G	483602.32	1345157.38
A8P2-01-C-8-G	483006.00	1345165.00
A8P2-03-C-2-G	483001.82	1345725.03
A8P2-04-C-2-G	482905.82	1345821.26

INFORMATION
ONLY

2- Modify Section 4.1 to add a fourth bullet. The bullet will state:

"All HPGe certification. The draft In-Situ HPGe Gamma Spectrometry detector Annual Calibration Validation Checklist and the draft In-Situ HPGe Gamma Spectrometry Data Validation Checklist:ASL D will be used. The "mock" validation will be performed by the FDF Data Validation Group. The "mock" validated data will NOT be used to render a certification decision and will NOT be included in the certification report".

3- Modify Section 2.3 Paragraph 2, line 21 to read:

"One non-consecutive duplicate HPGe reading will be obtained per CU at the same location where duplicate physical sample will be collected...."

REQUESTED BY: Joan WhiteDATE: 4/19/99

X IF REQD	VARIANCE/FAN APPROVAL	DATE	X IF REQD	VARIANCE/FAN APPROVAL	DATE
X	QUALITY ASSURANCE <i>John Thayer</i>	<i>4/22/99</i>	X	PROJECT MANAGER <i>John Thayer</i>	<i>4/21/99</i>
	DATA QUALITY MANAGEMENT		X	Real-time Program Mgr <i>John Thayer</i>	<i>4/17/99</i>
	ANALYTICAL CUSTOMER SUPPORT		X	WAC <i>John Thayer</i>	<i>4/20/99</i>
	OTHER		X <i>4473</i>	OTHER <i>John Thayer</i>	<i>4/19/99</i>
VARIANCE/FCN APPROVED [X] YES [] NO			REVISION REQUIRED: [] YES [x] NO		
DISTRIBUTION					
PROJECT MANAGER:		DOCUMENT CONTROL: Michelle Tudor		OTHER:	
QUALITY ASSURANCE:		OTHER:		OTHER:	

7

2235

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL151159
DRAG8938

To: NICKEL, KATHLEEN A
Control No: **VA10459**
Location/Mail Stop: 45
From: ECDC

Date: 01/08/99

FOLLOW INSTRUCTIONS BELOW
VARIANCE ON 21100-PSP-0001 R/0

Project	CWO	Document No	Rev	Title of Document	Comments
21100 VARIANCE		21100-PSP-0001-3	0	PSP FOR AREA 8, PHASE II AND THE AREA 6 TRIANGLE AREA PRECERTIFICATION REAL-TIME SCAN	INFORMATION ONLY
21100 VARIANCE		21100-PSP-0001-4	0	PSP FOR AREA 8, PHASE II AND THE AREA 6 TRIANGLE AREA PRECERTIFICATION REAL-TIME SCAN	INFORMATION ONLY

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VARIANCE / FIELD CHANGE NOTICE

V/F 21100-PSP-0001-3

WBS NO.: 21100-PSP-0001 REV. 0

Page 1 of 2PROJECT TITLE: PSP for Area 8, Phase II and the Area 6 Triangle Area Precertification
Real-Time Scan (21100-PSP-0001)Date: 1/6/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

Field Change Notice:

This Variance/Field Change Notice (V/FCN) documents two changes:

1. Per attached correspondence (page 2), precertification activities no longer need to be conducted in the portion of the Area 6 Triangle Area north of the drainage ditch that parallels the south side of the railroad tracks. This land will no longer be certified under the scope of this certification effort.

2. All HPGe measurement will be considered ASL A, but all measurement requirements will remain the same.

Justification:

1. The railroad corridor in the Triangle Area will not be certified until after Waste Pit remediation is complete and the rail line is removed. It will be treated as a like other corridors and will not be certified until other site remediation is completed.

2. The PSP identifies the HPGe readings as ASL B, however until an ASL B validation checklist is developed for real-time measurements, these measurements cannot be classified as ASL B.

REQUESTED BY: Eric Woods/Reinhard Friske Date: 1/6/99

X IF	VARIANCE/FCN APPROVAL	DATE	X IF	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>R. Friske</i>	1-6-99	X	PROJECT MANAGER <i>W. Edwards</i>	1/6/99
	DATA QUALITY MANAGEMENT		X	CHARACTERIZATION LEAD <i>Eric Woods</i>	1/6/99
	ANALYTICAL CUSTOMER SUPPORT		X	REAL-TIME PROGRAM MANAGER <i>John H. Thiel</i>	1/6/99
	OTHER			OTHER	
VARIANCE/FCN APPROVED [X] YES [] NO			REVISION REQUIRED: [] YES [x] NO		

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QUALITY ASSURANCE:	OTHER:	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

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9

2235

Author: Eric Woods at FNST-04

Date: 1/6/99 10:29 AM

Priority: Normal

TO: Eric Kroger at FNST-02

CC: Reinhard Friske at FNST-01, Jyh-Dong Chiou at FNST-02

Subject: SAMPLING APPROACH FOR RR TRACK AREA

V/FCN 21100-PSP-0001-3

Page 2 of 2
ESK

----- Message Contents -----

Eric,

I talked with J.D. yesterday regarding the approach for sampling the triangle portion of Area 6 that contains that railroad track. The agreed upon path forward was to eliminate that area as a CU (leaving only one CU in the triangle area) and defer certification to a later date eliminating the need to do any further precertification work at this time. That area will be certified per the SEP once the railroad tracks have been removed at some point in the future. This approach was discussed on the weekly agency conference call with Rob present and no one objected to the approach. Please proceed in this manner and let me know if there are further questions.

Thanks, Eric

2235

VARIANCE / FIELD CHANGE NOTICE

V/F 21100-PSP-0001-4

WBS NO.: 21100-PSP-0001

REV. 0

Page 1 of 2PROJECT TITLE: PSP for Area 8, Phase II and the Area 6 Triangle Area Precertification
Real-Time Scan (21100-PSP-0001)Date: 1/6/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

Field Change Notice:

Per an Ohio EPA comment, the precertification Phase 2 HPGe readings will be obtained to confirm the highest area of total activity within each identified CU. The highest areas of total activity were determined by review of mapped mobile NaI detector (Phase 1) data. The locations for these readings will be as follows:

CU	Northing	Easting
A8P11-01	483973.4	1345391.7
A8P11-02	483200.1	1345471.9
A8P11-03	483394.9	1345494.1
A8P11-04	482937.0	1345446.7
A6TA-01	482872.0	1344974.8

A map of these locations and the HPGe results will be provided in the Certification Design Letter for A8P11 and the Triangle Area.

Justification:

The Phase 2 "confirmation" readings were not specified in the Precertification PSP because the detection capabilities of the RTRAK are now below the applicable FRLs of A8P11 and the Triangle Area. Because the Ohio EPA has not yet approved these new detection capabilities, they are still requiring that the Phase 2 HPGe readings be obtained at areas of elevated activity. The related OEPA comment and DOE's response are attached (Page 2).

REQUESTED BY: Eric KrogerDate: 1/6/99

X IF	VARIANCE/FCN APPROVAL	DATE	X IF	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>Eric Kroger</i>	1-6-99	X	PROJECT MANAGER <i>Wil E. Wood</i>	1/6/99
	DATA QUALITY MANAGEMENT		X	CHARACTERIZATION LEAD <i>Eric Kroger</i>	1/6/99
	ANALYTICAL CUSTOMER SUPPORT		X	REAL-TIME PROGRAM MANAGER	
	OTHER			OTHER	
VARIANCE/FCN APPROVED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			REVISION REQUIRED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
DISTRIBUTION					
PROJECT MANAGER:		DOCUMENT CONTROL:		OTHER:	
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FIELD MANAGER:		OTHER:		OTHER:	

11

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V/FCN 21100-PSP-0001-4

Page 2 of 2
EJR

RESPONSES TO OHIO EPA COMMENTS ON THE
DRAFT PROJECT SPECIFIC PLAN FOR
AREA 8, PHASE II AND AREA 6 TRIANGLE
PRECERTIFICATION REAL-TIME SCAN
(REVISION B)

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

- 1) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.0 Pg #: 2-1 Line #: 18-22 Code: C
Original Comment #:
Comment: The proposed change to stop taking HPGe readings at the elevated RTRAK readings is inconsistent with Section 3.3.3 of the SEP which states, "... HPGe measurements will be taken above areas designated as elevated by NaI survey." DOE should collect HPGe readings at the most elevated RTRAK readings.
- Response: Before the Real-Time User's Manual is revised to clarify this requirement, DOE will continue to collect the minimum one HPGe confirmation reading per CU at areas of highest RTRAK total activity.
- Action: A Variance/Field Change Notice will be issued for the collection of these HPGe confirmation readings after Phase I (mobile NaI scan) results have been mapped.

2235

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL167696
DRAG8938

To: NICKEL, KATHLEEN A
Control No: **VA10459**
Location/Mail Stop: 45

Date: 04/27/99

From: ECDC

FOLLOW INSTRUCTIONS BELOW
VARIANCE ON 20200-PSP-0002 R/1

Project	CWO	Document No	Rev	Title of Document	Comments
20200 VARIANCE		20200-PSP-0002-3	0	PROJECT SPECIFIC PLAN FOR THE AREA 3 PREDESIGN INVESTIGATION OF PLANT 9	INFORMATION ONLY

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VARIANCE / FIELD CHANGE NOTICE

V/FCN 20200-PSP-0002-3

ECDC NO.: 20200-PSP-0002 Rev. 1

Page 1 of 1

PROJECT TITLE: PSP for the Area 3 Predesign Investigation of Plant 9

Date: 4/21/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

CHANGE:

Appendix B of the PSP, as modified by V/FCN 20200-PSP-0002-1, lists the sample intervals to be collected from the Plant 9 borings. It indicates that sample A3-12392-10 was to be collected and analyzed for 1,1-dichloroethene, trichloroethene, and tetrachloroethene; an associated alpha/beta screening sample was also to be collected. A recent review of laboratory data indicated that sample A3-12392-10 was not collected. This change should have been captured by V/FCN 20200-PSP-0002-1 but was inadvertently omitted.

JUSTIFICATION:

The VOC sampling intervals identified in Appendix B of the Plant 9 PSP were changed because PID readings taken in the field indicated that alternate intervals had higher concentrations of VOCs.

REQUESTED BY: Christine Messerly

DATE: 4/21/99

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>John Thompson</i>	4/27/99	X	PROJECT MANAGER <i>John Thompson</i>	4/23/99
	DATA QUALITY MANAGEMENT			Real-time Program Mgr	
	ANALYTICAL CUSTOMER SUPPORT		X	Characterization Lead <i>CM Messerly</i>	4/22/99
X	Sampling Team Manager <i>Tom Buhlage for Mike Frank</i>	4/22/99	X	WAO <i>Jinda Barton</i>	4/23/99
VARIANCE/FCN APPROVED [X]YES []NO			REVISION REQUIRED: []YES [x]NO		
DISTRIBUTION					
PROJECT MANAGER:		DOCUMENT CONTROL: Jeannie Rosser		OTHER:	
QUALITY ASSURANCE:		OTHER:		OTHER:	

INFORMATION
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14

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TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL

163836
ROSS9966

To: NICKEL, KATHLEEN A
Control No: **VA10459**
Location/Mail Stop: 45
From: ECDC

Date: 04/06/99

FOLLOW INSTRUCTIONS BELOW
VARIANCE FOR AREA 3 PSP 20200-PSP-0002

Project	CWO	Document No	Rev	Title of Document	Comments
20200 VARIANCE		20200-PSP-0002-2	0	PROJECT SPECIFIC PLAN FOR THE AREA 3 PREDESIGN INVESTIGATION OF PLANT 9	INFORMATION ONLY

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VARIANCE / FIELD CHANGE NOTICE

V/FCN 20200-PSP-0002-2

WBS NO.: ECDC #20200-PSP-0002 Rev. 1

Page 1 of 2

PROJECT TITLE: PSP for the Area 3 Predesign Investigation of Plant 9

Date: 3/30/99

VARIANCE / FIELD CHANGE NOTICE (Include Justification):

Section 1.2 of the subject PSP states that, "Following review of the sample results, additional samples may be taken beyond those identified in this PSP if additional data is needed. In this situation, a variance to this PSP will be written if archived samples are to be analyzed or a new PSP will be written if additional borings are needed." In accordance with this section, the following additional analyses will be performed:

1. The following archive samples will be submitted for on-site uranium and thorium analysis by ICP/MS (TAL A):
A3-12392-16 (7.5-8.0 feet), A3-12392-20 (9.5-10.0 feet), A3-12392-22 (10.5-11.0 feet)

JUSTIFICATION:

The three uranium samples analyzed from Boring 12392 were above the uranium FRL. Additional analysis of archive samples is needed to bound the above-FRL contamination at depth.

2. The following archive samples will be submitted for on-site uranium and thorium analysis by ICP/MS (TAL A):
A3-12398-14 (6.5-7.0 feet), A3-12398-18 (8.5-9.0 feet), A3-12398-24 (11.5-12.0 feet)

JUSTIFICATION:

The samples collected from Boring 12398 demonstrated an increasing trend of uranium concentrations with depth. The deepest analyzed sample (5.5 feet) has a uranium concentration of 17.5 mg/kg which is close to the FRL of 20 mg/kg for the Plant 9 area. The additional samples are being analyzed to determine if the uranium concentration exceeds the FRL at deeper elevations.

3. The following archive samples will be submitted for on-site uranium and thorium analysis by ICP/MS (TAL A):
A3-12394-20 (9.5-10.0 feet) A3-12396-20 (9.5-10.0 feet)
A3-12394-32 (15.5-16.0 feet) A3-12396-31 (15.0-15.5 feet)

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JUSTIFICATION:

Borings 12394 and 12396 were located near the main Plant 9 sump, which is believed to be approximately 15 feet deep. Although above-FRL contamination was either not identified or was vertically bounded in these two borings to a depth of 5.5 feet, archive samples from approximately 10 and 15 feet are being analyzed for uranium and thorium to determine if there was leakage from the sump that would not have been evident in the shallower samples.

The following archive samples will be submitted for on-site uranium and thorium analysis by ICP/MS (TAL A):
A3-12395-48 (24.5-25.0 feet) and A3-12395-53 (27.0-27.5 feet)

JUSTIFICATION:

Boring 12395 was positioned near 26-foot deep hydraulic rams. Although no contamination was identified in the top 5.5 feet of the boring, two samples from the bottom of the boring will be analyzed to determine if the rams have leaked contamination into the surrounding soil.

REQUESTED BY: Christine Messerly

DATE: 3/30/99

16

2235

VARIANCE / FIELD CHANGE NOTICE

V/FCN 20200-PSP-0002-2

WBS NO.: ECDC #20200-PSP-0002 Rev. 1

Page 2 of 2

PROJECT TITLE: PSP for the Area 3 Predesign Investigation of Plant 9

Date: 3/30/99

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>TD Mike</i>	4-5-99	X	PROJECT MANAGER <i>[Signature]</i>	4/5/99
	DATA QUALITY MANAGEMENT			Real Time Program Mgr	
	ANALYTICAL CUSTOMER SUPPORT		X	Characterization Lead <i>C. Messelby</i>	4/2/99
X	Sampling Team Manager <i>Tom Bukilaga</i>	4/6/99	X	WAO <i>[Signature]</i>	4/6/99
VARIANCE/FCN APPROVED [X]YES []NO			REVISION REQUIRED: []YES [x]NO		

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PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:

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TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL

163835
ROSS9966

To: NICKEL, KATHLEEN A. Date: 04/06/99
Control No: **VA10459**
Location/Mail Stop: 45
From: ECDC

FOLLOW INSTRUCTIONS BELOW
VARIANCE FOR AREA 3 PSP 20810-PSP-0002

Project	CWO	Document No	Rev	Title of Document	Comments
20810 VARIANCE		20810-PSP-0002-04	0	PSP FOR AREA 3 PRE-DESIGN INVESTIGATION OF POTENTIALLY CHARACTERISTIC AREAS	INFORMATION ONLY

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VARIANCE / FIELD CHANGE NOTICE

V/FCN 20810-PSP-0002-4

WBS NO.: ECDC #20810-PSP-0002 Rev. 0

Page 1 of 4

PROJECT TITLE: PSP for the Area 3 Pre-Design Investigation of Potentially Characteristic Areas

Date: 3/30/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

Section 1.2 of the PSP states that "Following review of the sample results, additional samples may be taken beyond those identified in this PSP if the extent of characteristic hazardous waste has not been bound. In this situation, a variance to this PSP will be written."

Section 2.1 of the PSP states that "Following characterization of lead and trichloroethene, additional uranium, thorium, and radium analyses will be conducted on collected samples for comparison to the FRLs. Because the details of these additional laboratory analyses are not known at this time, a variance to this PSP will be written prior to beginning this effort."

In accordance with Sections 1.2 and 2.1 of the PSP, the following additional analyses will be conducted:

1. In the KC-2 Warehouse Area:

Using a hand auger, collect a sample from 0-0.5 feet for on-site TCLP lead analysis (TAL B) and collect an archive sample from 0.5-1.0. The sample location will be identified as KC04A and should be field located as close to sample location KC04 as possible. The archive sample must be cooled to 2-6°C.

Collect samples from the 1.0-1.5 and 3.0-3.5 foot intervals of the original KC04 archive core for on-site uranium and thorium analysis by ICP/MS (TAL D).

The attached addendum to Appendix B of the PSP lists the sample identification numbers for each of these samples.

JUSTIFICATION:

The total lead result from KC04 exceeded the KC-2 Warehouse area lead screening level of 100 mg/kg which was established in accordance with the PSP. Therefore, TCLP analysis will be performed on a sample from that location. In addition, the uranium concentration at KC04 was greater than the FRL, so additional samples are being analyzed to vertically bound the above-FRL contamination.

In the Scrap Metal Pile Area:

Collect samples from the 0-0.5 foot interval of the original SM18, SM23, and SM31 archive cores for on-site TCLP lead analysis (TAL B). Collect samples from the 0.5-1.0 and 1.0-1.5 foot intervals of the same borings for archive. The archive samples must be cooled to 2-6°C.

Collect samples from the following sample locations and intervals for on-site uranium and thorium analysis by ICP/MS (TAL D):

SM05	3.0'-3.5'	SM22	3.0'-3.5'
SM11	3.0'-3.5'	SM23	4.5'-5.0'
SM12	3.0'-3.5'		9.5'-10.0'
SM13	3.0'-3.5'		14.5'-15.0'
SM15	3.0'-3.5'	SM24	2.0'-2.5'
SM16	3.0'-3.5'	SM30	3.0'-3.5'
SM17	3.0'-3.5'	SM31	3.0'-3.5'
SM18	3.0'-3.5'	SM32	3.0'-3.5'
SM19	4.5'-5.0'	SM34	3.0'-3.5'
	9.5'-10.0'	SM37	3.0'-3.5'
	14.5'-15.0'	SM38	3.0'-3.5'
SM20	4.5'-5.0'		
	9.5'-10.0'		
	14.5'-15.0'		

INFORMATION
ONLY

2235

VARIANCE / FIELD CHANGE NOTICE

V/FCN 20810-PSP-0002-4

/BS NO.: ECDC #20810-PSP-0002 Rev. 0

Page 2 of 4

PROJECT TITLE: PSP for the Area 3 Pre-Design Investigation of Potentially Characteristic Areas

Date: 3/30/99

JUSTIFICATION:

The TCLP lead analysis is being performed in accordance with Variance 1 to this PSP (20810-PSP-0002-1) which incorporated responses to EPA comments. The response to comment stated that, "Because Areas 2 and 3 of the Scrap Metal Pile Area ... have only one sample being collected for initial TCLP analysis, at least the sample with the highest total lead concentrations above the 20-times limit will also undergo TCLP analysis so that it can be compared to the initial results."

The uranium/thorium analysis is being performed to bound above-FRL contamination at depth.

REQUESTED BY: Christine Messerly

DATE: 3/30/99

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
	QUALITY ASSURANCE <i>[Signature]</i>	4/5/99	X	PROJECT MANAGER <i>[Signature]</i>	4/5/99
	DATA QUALITY MANAGEMENT			Restoration Program Mgr.	
	ANALYTICAL CUSTOMER SUPPORT		X	Characterization Lead <i>[Signature]</i>	4/2/99
	Sampling Team Manager: <i>Tom Bullage</i>	4/6/99	X	WAG <i>[Signature]</i>	4/6/99
VARIANCE/FCN APPROVED (X)YES ()NO			REVISION REQUIRED: ()YES (x)NO		

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:

20

ADDENDUM TO APPENDIX B

**ADDITIONAL SOIL SAMPLES FOR THE INVESTIGATION OF
POTENTIALLY CHARACTERISTIC AREAS IN AREA 3**

Location	Easting	Northing	Depth	Sample ID	Analysis	Analytes
KC-2 WAREHOUSE AREA						
KC04	1349704.60	482185.19	1.0'-1.5'	A3-KC04-3	TAL D	Uranium, thorium
			3.0'-3.5'	A3-KC04-7	TAL D	Uranium, thorium
KC04A	TBD	TBD	0'-0.5'	A3-KC04A-1	TAL B	TCLP lead
			0.5'-1.0'	A3-KC04A-2V		Archive
SCRAP METAL PILE AREA						
SM05	1350055.25	482046.63	3.0'-3.5'	A3-SM05-7	TAL D	Uranium, thorium
SM11	1350088.33	481957.19	3.0'-3.5'	A3-SM11-7	TAL D	Uranium, thorium
SM12	1350280.64	481959.26	3.0'-3.5'	A3-SM12-7	TAL D	Uranium, thorium
SM13	1350427.96	481957.71	3.0'-3.5'	A3-SM13-7	TAL D	Uranium, thorium
SM15	1349902.09	481901.13	3.0'-3.5'	A3-SM15-7	TAL D	Uranium, thorium
SM16	1349900.86	481822.69	3.0'-3.5'	A3-SM16-7	TAL D	Uranium, thorium
SM17	1350179.69	481909.70	3.0'-3.5'	A3-SM17-7	TAL D	Uranium, thorium
SM18	1350253.23	481908.48	0'-0.5'	A3-SM18-1A	TAL B	TCLP lead
			0.5'-1.0'	A3-SM18-2A-V		Archive
			1.0'-1.5'	A3-SM18-3V		Archive
			3.0'-3.5'	A3-SM18-7	TAL D	Uranium, thorium
SM19	1350348.22	481907.87	4.5'-5.0'	A3-SM19-10	TAL D	Uranium, thorium
			9.5'-10.0'	A3-SM19-20	TAL D	Uranium, thorium
			14.5'-15.0'	A3-SM19-30	TAL D	Uranium, thorium
SM20	1350459.75	481910.93	4.5'-5.0'	A3-SM20-10	TAL D	Uranium, thorium
			9.5'-10.0'	A3-SM20-20	TAL D	Uranium, thorium
			14.5'-15.0'	A3-SM20-30	TAL D	Uranium, thorium
SM22	1350278.70	481843.23	3.0'-3.5'	A3-SM22-7	TAL D	Uranium, thorium
SM23	1350401.53	481822.03	0'-0.5'	A3-SM23-1A	TAL B	TCLP lead
			0.5'-1.0'	A3-SM23-2A-V		Archive
			1.0'-1.5'	A3-SM23-3V		Archive
			4.5'-5.0'	A3-SM23-10	TAL D	Uranium, thorium
			9.5'-10.0'	A3-SM23-20	TAL D	Uranium, thorium
			14.5'-15.0'	A3-SM23-30	TAL D	Uranium, thorium
SM24	1350495.97	481858.38	2.0'-2.5'	A3-SM24-5	TAL D	Uranium, thorium

2235

V/FCN 20810-PSP-0002-4

page 4 of 4

3/30/99

Location	Easting	Northing	Depth	Sample ID	Analysis	Analytes
SM30	1350454.23	481750.92	3.0'-3.5'	A3-SM30-7	TAL D	Uranium, thorium
SM31	1350551.63	481752.75	0'-0.5'	A3-SM31-1A	TAL B	TCLP lead
			0.5'-1.0'	A3-SM31-2A-V		Archive
			1.0'-1.5'	A3-SM31-3V		Archive
			3.0'-3.5'	A3-SM31-7	TAL D	Uranium, thorium
SM32	1349943.73	481701.86	3.0'-3.5'	A3-SM32-7	TAL D	Uranium, thorium
SM34	1350149.25	481703.19	3.0'-3.5'	A3-SM34-7	TAL D	Uranium, thorium
SM37	1350502.03	481652.83	3.0'-3.5'	A3-SM37-7	TAL D	Uranium, thorium
SM38	1350580.39	481853.25	3.0'-3.5'	A3-SM38-7	TAL D	Uranium, thorium

22

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2235

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL

167699
DRAG8938

To: NICKEL, KATHLEEN A
Control No: **VA10459**
Location/Mail Stop: 45
From: ECDC

Date: 04/27/99

FOLLOW INSTRUCTIONS BELOW
VARIANCE ON 20810-PSP-0002 R/0

Project	CWO	Document No	Rev	Title of Document	Comments
20810 VARIANCE		20810-PSP-0002-05	0	PSP FOR AREA 3 PRE-DESIGN INVESTIGATION OF POTENTIALLY CHARACTERISTIC AREAS	INFORMATION ONLY

As a controlled document holder, you are required to destroy any old revisions of this document. Sign and date below, verifying receipt of these documents. **Return this record of receipt to ECDC PROJECT DOCUMENT CONTROL, 52-7.** Return receipt within ten (10) days of transmittal date.

Signature

Date

23

2235

VARIANCE / FIELD CHANGE NOTICE

V/FCN 20810-PSP-0002-5

WBS NO.: ECDC #20810-PSP-0002 Rev. 0

Page 1 of 1

PROJECT TITLE: PSP for the Area 3 Pre-Design Investigation of Potentially Characteristic Areas

Date: 4/22/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

CHANGE:

The addendum to Appendix B that was included in V/FCN 20810-PSP-0002-4 identified six sample intervals that would be collected from the cores of borings SM18, SM23, and SM31, placed into sample containers, and labeled. They are:

A3-SM18-2A-V
A3-SM18-3V
A3-SM23-2A-V
A3-SM23-3V
A3-SM31-2A-V
A3-SM31-3V

INFORMATION
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Instead of collecting these samples in containers, they were left in the Macro-core liners, which are capped, taped, and cooled in storage. Each core liner is numbered and the depth intervals are marked on the liner. If these samples are collected for laboratory analysis in the future, they will receive the sample numbers that are listed above (without the "V" notation).

JUSTIFICATION:

The characterization lead determined that archiving samples in containers was not necessary.

REQUESTED BY: Christine Messerly

DATE: 4/22/99

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>Frank Thompson</i>	4/27/99	X	PROJECT MANAGER <i>W. Miller</i>	4/23/99
	DATA QUALITY MANAGEMENT			Real-time Program Mgr	
	ANALYTICAL CUSTOMER SUPPORT		X	Characterization Lead <i>C. Messerly</i>	4/22/99
X	Sampling Team Manager <i>Tom B. [unclear]</i>		X	WAO <i>Sandra Barton</i>	4/23/99
VARIANCE/FCN APPROVED [X]YES []NO			REVISION REQUIRED: []YES [x]NO		

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:

24

VARIANCE / FIELD CHANGE NOTICE

V/FCN 20810-PSP-0002-5

WBS NO.: ECDC #20810-PSP-0002 Rev. 0

Page 1 of 7

PROJECT TITLE: PSP for the Area 3 Pre-Design Investigation of Potentially Characteristic Areas

Date: 4/7/99

VARIANCE / FIELD CHANGE NOTICE (Include Justification):

Section 1.2 of the PSP states that "Following review of the sample results, additional samples may be taken beyond those identified in this PSP if the extent of characteristic hazardous waste has not been bound. In this situation, a variance to this PSP will be written."

In accordance with Section 1.2 of the PSP, the following additional analyses will be conducted:

1. Conduct 7 additional borings (MB10 through MB16) to a depth of 10 feet in the characteristic area north of the Maintenance Building. Ten samples will be collected from each boring and will be analyzed off-site for TCLP trichloroethene. One additional sample from each interval will also be collected for on-site alpha/beta screening.

The attached figure illustrates the location of borings MB10 through MB16. The attached addendum to Appendix B of the PSP lists the northing and easting coordinates, sample intervals, and sample identification numbers for each of the additional borings.

JUSTIFICATION:

TCLP analysis conducted under this PSP indicated that trichloroethene is present in the soil north of the Maintenance Building at levels that exceed the characteristic regulatory limit in borings MB01, MB02, MB03, and MB05. However, the initial investigation did not bound the limits of this hazardous soil in either the horizontal or vertical directions. The seven additional borings will surround the original borings with elevated levels of trichloroethene to the east, west, and south and will be advanced 3 feet deeper than the original borings. No additional borings are being conducted to the north of the contamination due to the location of the Maintenance Building Warehouse. Following D&D of that building, additional borings will be conducted to bound the contamination to the north.

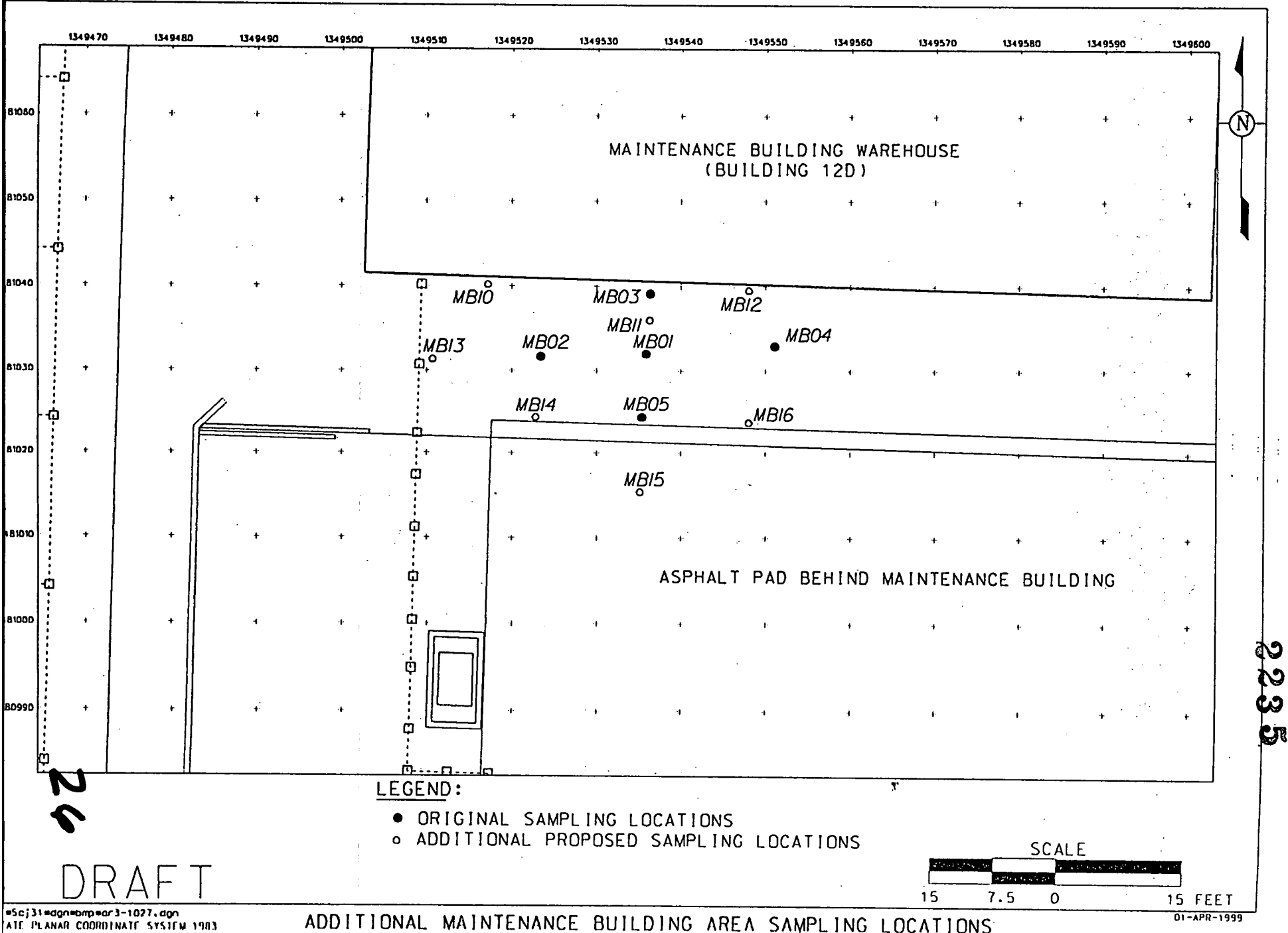
REQUESTED BY: Christine MesserlyDATE: 4/7/99

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE		X	PROJECT MANAGER	
	DATA QUALITY MANAGEMENT			Real-time Program Mgr	
	ANALYTICAL CUSTOMER SUPPORT		X	Characterization Lead	
X	Sampling Team Manager			WAO	

VARIANCE/FCN APPROVED ☒ YES ☐ NOREVISION REQUIRED: ☐ YES ☒ NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:



ADDENDUM TO APPENDIX B

ADDITIONAL SOIL SAMPLES FOR THE INVESTIGATION OF
POTENTIALLY CHARACTERISTIC AREAS IN AREA 3

Location	Easting	Northing	Depth	Sample ID	Analysis	Analytes
MAINTENANCE BUILDING AREA						
MB10	1349517.02	481040.26	0'-0.5"	A3-MB10-1	TAL A	TCLP Trichloroethene
			0'-0.5'	A3-MB10-1AB		Alpha/Beta Screen
			1.5'-2.0'	A3-MB10-4	TAL A	TCLP Trichloroethene
			1.5'-2.0'	A3-MB10-4AB		Alpha/Beta Screen
			2.5'-3.0'	A3-MB10-6	TAL A	TCLP Trichloroethene
			2.5'-3.0'	A3-MB10-6AB		Alpha/Beta Screen
			3.5'-4.0'	A3-MB10-8	TAL A	TCLP Trichloroethene
			3.5'-4.0'	A3-MB10-8AB		Alpha/Beta Screen
			4.5'-5.0'	A3-MB10-10	TAL A	TCLP Trichloroethene
			4.5'-5.0'	A3-MB10-10AB		Alpha/Beta Screen
			5.5'-6.0'	A3-MB10-12	TAL A	TCLP Trichloroethene
			5.5'-6.0'	A3-MB10-12AB		Alpha/Beta Screen
			6.5'-7.0'	A3-MB10-14	TAL A	TCLP Trichloroethene
			6.5'-7.0'	A3-MB10-14AB		Alpha/Beta Screen
			7.5'-8.0'	A3-MB10-16	TAL A	TCLP Trichloroethene
			7.5'-8.0'	A3-MB10-16AB		Alpha/Beta Screen
			8.5'-9.0'	A3-MB10-18	TAL A	TCLP Trichloroethene
			8.5'-9.0'	A3-MB10-18AB		Alpha/Beta Screen
			9.5'-10.0'	A3-MB10-20	TAL A	TCLP Trichloroethene
			9.5'-10.0'	A3-MB10-20AB		Alpha/Beta Screen
MB11	TBD	TBD	0'-0.5"	A3-MB11-1	TAL A	TCLP Trichloroethene
			0'-0.5'	A3-MB11-1AB		Alpha/Beta Screen
			1.5'-2.0'	A3-MB11-4	TAL A	TCLP Trichloroethene
			1.5'-2.0'	A3-MB11-4AB		Alpha/Beta Screen
			2.5'-3.0'	A3-MB11-6	TAL A	TCLP Trichloroethene
			2.5'-3.0'	A3-MB11-6AB		Alpha/Beta Screen
			3.5'-4.0'	A3-MB11-8	TAL A	TCLP Trichloroethene
			3.5'-4.0'	A3-MB11-8AB		Alpha/Beta Screen
			4.5'-5.0'	A3-MB11-10	TAL A	TCLP Trichloroethene
			4.5'-5.0'	A3-MB11-10AB		Alpha/Beta Screen

Location	Easting	Northing	Depth	Sample ID	Analysis	Analytes
MB11 (cont.)	TBD	TBD	5.5'-6.0'	A3-MB11-12	TAL A	TCLP Trichloroethene
			5.5'-6.0'	A3-MB11-12AB		Alpha/Beta Screen
			6.5'-7.0'	A3-MB11-14	TAL A	TCLP Trichloroethene
			6.5'-7.0'	A3-MB11-14AB		Alpha/Beta Screen
			7.5'-8.0'	A3-MB11-16	TAL A	TCLP Trichloroethene
			7.5'-8.0'	A3-MB11-16AB		Alpha/Beta Screen
			8.5'-9.0'	A3-MB11-18	TAL A	TCLP Trichloroethene
			8.5'-9.0'	A3-MB11-18AB		Alpha/Beta Screen
			9.5'-10.0'	A3-MB11-20	TAL A	TCLP Trichloroethene
			9.5'-10.0'	A3-MB11-20AB		Alpha/Beta Screen
MB12	1349547.84	481039.58	0'-0.5"	A3-MB12-1	TAL A	TCLP Trichloroethene
			0'-0.5'	A3-MB12-1AB		Alpha/Beta Screen
			1.5'-2.0'	A3-MB12-4	TAL A	TCLP Trichloroethene
			1.5'-2.0'	A3-MB12-4AB		Alpha/Beta Screen
			2.5'-3.0'	A3-MB12-6	TAL A	TCLP Trichloroethene
			2.5'-3.0'	A3-MB12-6AB		Alpha/Beta Screen
			3.5'-4.0'	A3-MB12-8	TAL A	TCLP Trichloroethene
			3.5'-4.0'	A3-MB12-8AB		Alpha/Beta Screen
			4.5'-5.0'	A3-MB12-10	TAL A	TCLP Trichloroethene
			4.5'-5.0'	A3-MB12-10AB		Alpha/Beta Screen
			5.5'-6.0'	A3-MB12-12	TAL A	TCLP Trichloroethene
			5.5'-6.0'	A3-MB12-12AB		Alpha/Beta Screen
			6.5'-7.0'	A3-MB12-14	TAL A	TCLP Trichloroethene
			6.5'-7.0'	A3-MB12-14AB		Alpha/Beta Screen
			7.5'-8.0'	A3-MB12-16	TAL A	TCLP Trichloroethene
			7.5'-8.0'	A3-MB12-16AB		Alpha/Beta Screen
			8.5'-9.0'	A3-MB12-18	TAL A	TCLP Trichloroethene
			8.5'-9.0'	A3-MB12-18AB		Alpha/Beta Screen
			9.5'-10.0'	A3-MB12-20	TAL A	TCLP Trichloroethene
			9.5'-10.0'	A3-MB12-20AB		Alpha/Beta Screen
MB13	1349510.54	481031.38	0'-0.5"	A3-MB13-1	TAL A	TCLP Trichloroethene
			0'-0.5'	A3-MB13-1AB		Alpha/Beta Screen
			1.5'-2.0'	A3-MB13-4	TAL A	TCLP Trichloroethene
			1.5'-2.0'	A3-MB13-4AB		Alpha/Beta Screen
			2.5'-3.0'	A3-MB13-6	TAL A	TCLP Trichloroethene

Location	Easting	Northing	Depth	Sample ID	Analysis	Analytes
MB13 (cont.)	1349510.54	481031.38	2.5'-3.0'	A3-MB13-6AB		Alpha/Beta Screen
			3.5'-4.0'	A3-MB13-8	TAL A	TCLP Trichloroethene
			3.5'-4.0'	A3-MB13-8AB		Alpha/Beta Screen
			4.5'-5.0'	A3-MB13-10	TAL A	TCLP Trichloroethene
			4.5'-5.0'	A3-MB13-10AB		Alpha/Beta Screen
			5.5'-6.0'	A3-MB13-12	TAL A	TCLP Trichloroethene
			5.5'-6.0'	A3-MB13-12AB		Alpha/Beta Screen
			6.5'-7.0'	A3-MB13-14	TAL A	TCLP Trichloroethene
			6.5'-7.0'	A3-MB13-14AB		Alpha/Beta Screen
			7.5'-8.0'	A3-MB13-16	TAL A	TCLP Trichloroethene
			7.5'-8.0'	A3-MB13-16AB		Alpha/Beta Screen
			8.5'-9.0'	A3-MB13-18	TAL A	TCLP Trichloroethene
			8.5'-9.0'	A3-MB13-18AB		Alpha/Beta Screen
			9.5'-10.0'	A3-MB13-20	TAL A	TCLP Trichloroethene
			9.5'-10.0'	A3-MB13-20AB		Alpha/Beta Screen
MB14	1349522.66	481024.38	0'-0.5"	A3-MB14-1	TAL A	TCLP Trichloroethene
			0'-0.5'	A3-MB14-1AB		Alpha/Beta Screen
			1.5'-2.0'	A3-MB14-4	TAL A	TCLP Trichloroethene
			1.5'-2.0'	A3-MB14-4AB		Alpha/Beta Screen
			2.5'-3.0'	A3-MB14-6	TAL A	TCLP Trichloroethene
			2.5'-3.0'	A3-MB14-6AB		Alpha/Beta Screen
			3.5'-4.0'	A3-MB14-8	TAL A	TCLP Trichloroethene
			3.5'-4.0'	A3-MB14-8AB		Alpha/Beta Screen
			4.5'-5.0'	A3-MB14-10	TAL A	TCLP Trichloroethene
			4.5'-5.0'	A3-MB14-10AB		Alpha/Beta Screen
			5.5'-6.0'	A3-MB14-12	TAL A	TCLP Trichloroethene
			5.5'-6.0'	A3-MB14-12AB		Alpha/Beta Screen
			6.5'-7.0'	A3-MB14-14	TAL A	TCLP Trichloroethene
			6.5'-7.0'	A3-MB14-14AB		Alpha/Beta Screen
			7.5'-8.0'	A3-MB14-16	TAL A	TCLP Trichloroethene
			7.5'-8.0'	A3-MB14-16AB		Alpha/Beta Screen
			8.5'-9.0'	A3-MB14-18	TAL A	TCLP Trichloroethene
			8.5'-9.0'	A3-MB14-18AB		Alpha/Beta Screen
			9.5'-10.0'	A3-MB14-20	TAL A	TCLP Trichloroethene
			9.5'-10.0'	A3-MB14-20AB		Alpha/Beta Screen

2235

V/FCN 20810-PSP-0002-5

page 6 of 7

4/7/99

Location	Easting	Northing	Depth	Sample ID	Analysis	Analytes
MB15	1349534.99	481015.45	0'-0.5"	A3-MB15-1	TAL A	TCLP Trichloroethene
			0'-0.5'	A3-MB15-1AB		Alpha/Beta Screen
			1.5'-2.0'	A3-MB15-4	TAL A	TCLP Trichloroethene
			1.5'-2.0'	A3-MB15-4AB		Alpha/Beta Screen
			2.5'-3.0'	A3-MB15-6	TAL A	TCLP Trichloroethene
			2.5'-3.0'	A3-MB15-6AB		Alpha/Beta Screen
			3.5'-4.0'	A3-MB15-8	TAL A	TCLP Trichloroethene
			3.5'-4.0'	A3-MB15-8AB		Alpha/Beta Screen
			4.5'-5.0'	A3-MB15-10	TAL A	TCLP Trichloroethene
			4.5'-5.0'	A3-MB15-10AB		Alpha/Beta Screen
			5.5'-6.0'	A3-MB15-12	TAL A	TCLP Trichloroethene
			5.5'-6.0'	A3-MB15-12AB		Alpha/Beta Screen
			6.5'-7.0'	A3-MB15-14	TAL A	TCLP Trichloroethene
			6.5'-7.0'	A3-MB15-14AB		Alpha/Beta Screen
			7.5'-8.0'	A3-MB15-16	TAL A	TCLP Trichloroethene
			7.5'-8.0'	A3-MB15-16AB		Alpha/Beta Screen
			8.5'-9.0'	A3-MB15-18	TAL A	TCLP Trichloroethene
			8.5'-9.0'	A3-MB15-18AB		Alpha/Beta Screen
			9.5'-10.0'	A3-MB15-20	TAL A	TCLP Trichloroethene
			9.5'-10.0'	A3-MB15-20AB		Alpha/Beta Screen
MB16	1349547.84	481023.75	0'-0.5"	A3-MB16-1	TAL A	TCLP Trichloroethene
			0'-0.5'	A3-MB16-1AB		Alpha/Beta Screen
			1.5'-2.0'	A3-MB16-4	TAL A	TCLP Trichloroethene
			1.5'-2.0'	A3-MB16-4AB		Alpha/Beta Screen
			2.5'-3.0'	A3-MB16-6	TAL A	TCLP Trichloroethene
			2.5'-3.0'	A3-MB16-6AB		Alpha/Beta Screen
			3.5'-4.0'	A3-MB16-8	TAL A	TCLP Trichloroethene
			3.5'-4.0'	A3-MB16-8AB		Alpha/Beta Screen
			4.5'-5.0'	A3-MB16-10	TAL A	TCLP Trichloroethene
			4.5'-5.0'	A3-MB16-10AB		Alpha/Beta Screen
			5.5'-6.0'	A3-MB16-12	TAL A	TCLP Trichloroethene
			5.5'-6.0'	A3-MB16-12AB		Alpha/Beta Screen
			6.5'-7.0'	A3-MB16-14	TAL A	TCLP Trichloroethene
			6.5'-7.0'	A3-MB16-14AB		Alpha/Beta Screen
			7.5'-8.0'	A3-MB16-16	TAL A	TCLP Trichloroethene

30

2235

V/FCN 20810-PSP-0002-5

page 7 of 7

4/7/99

Location	Easting	Northing	Depth	Sample ID	Analysis	Analytes
MB16 (cont.)	1349547.84	481023.75	7.5'-8.0'	A3-MB16-16AB		Alpha/Beta Screen
			8.5'-9.0'	A3-MB16-18	TAL A	TCLP Trichloroethene
			8.5'-9.0'	A3-MB16-18AB		Alpha/Beta Screen
			9.5'-10.0'	A3-MB16-20	TAL A	TCLP Trichloroethene
			9.5'-10.0'	A3-MB16-20AB		Alpha/Beta Screen

2235

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL156937
DRAG8938

To: NICKEL, KATHLEEN A
Control No: **VA10459**
Location/Mail Stop: 45
From: ECDC

Date: 02/16/99

FOLLOW INSTRUCTIONS BELOW
VARIANCE ON 20810-PSP-0002 R/0

Project	CWO	Document No	Rev	Title of Document	Comments
20810 VARIANCE		20810-PSP-0002-02	0	PSP FOR AREA 3 PRE-DESIGN INVESTIGATION OF POTENTIALLY CHARACTERISTIC AREAS	INFORMATION ONLY

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Signature

Date

32

IF TERMINATION OR TRANSFER OCCURS, NOTIFY ECDC PROJECT DOCUMENT CONTROL AT
4595

VARIANCE / FIELD CHANGE NOTICE

V/FCN 20810-PSP-0002-2

WBS NO.: ECDC #20810-PSP-0002 Rev. 0

Page 1 of 2

PROJECT TITLE: PSP for Area 3 Pre-Design Investigation of Potentially Characteristic Areas

Date: 2/10/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

1. CHANGE:

The following samples points were relocated at the Scrap Metal Pile area:

LOCATION	RELOCATED	NORTHING	EASTING
SM17	26 feet south	481883.25	1350179.59
SM18	26 feet south	481882.95	1350253.17
SM19	26 feet south	481881.65	1350348.19
SM20	24 feet south	481880.40	1350459.50
SM25	6 feet south	481729.02	1350002.30
SM26	6 feet south and 2 feet west	481723.02	1350057.13
SM27	10 feet south	481713.40	1350119.10
SM28	8 feet south and 16 feet east	481744.35	1350268.75
SM34	3 feet west	481703.21	1350146.59
SM37	14 feet south	TBD	TBD

INFORMATION
ONLY

JUSTIFICATION:

These sample locations were relocated due to underground utility obstruction and Geoprobe access restrictions.

2. CHANGE:

The following changes apply to information contained in Appendix B for archive sample identification and potential future analysis of archives:

- ▶ For all 0'-0.5' archive samples from the Scrap Metal Pile area (e.g., A3-SM35-1V), change the ID to A3-SM##-1A-V at the time of collection.
- ▶ For all archive samples collected from the Maintenance Bldg. and KC-2 Whse. area (these samples were collected prior to this variance) that require future analysis, the depth code will be appended with an "A" and the "V" will be omitted (Example: A3-MB07-1V changed to A3-MB07-1A when submitted for analysis).
- Where the Appendix B table does not specify unique sample IDs for each 4-foot archive core tube (e.g., A3-SM23), a sequential unique ID will be given to each 4-foot archive tube (e.g., A3-SM##-2V, A3-SM##-3V, etc.).
- ▶ If samples are later retrieved for analysis from an archived core tube, the -1V, -2V, etc. suffix will be omitted and a depth code based on the sample interval will be used in its place. For example, an archive sample cut from a core tube that represents a depth interval of 5.5'-6.0' will be identified as A3-SM##-12.
- If other circumstances arise for the need to create new sample IDs for samples pulled from archive storage, the new ID will be assigned similar to the IDs described above to maintain unique IDs for each sample.

JUSTIFICATION:

The change in sample numbering is to avoid duplicate sample identifiers.

3. CHANGE:

Sample locations SM24, SM25, SM26, SM27, and SM30 were drilled using a hand auger instead of the Geoprobe. Because the hand auger does not produce a core like the Geoprobe, individual archive samples had to be collected. Samples were collected from the 0'-0.5', 1'-1.5', 2'-2.5', and 3'-3.5' intervals. The archive samples will be identified as A3-SM##-1AV, A3-SM##-3V, A3-SM##-5V, and A3-SM##-7V.

JUSTIFICATION:

The hand auger had to be used instead of the Geoprobe due to utilities that were located very near the sample location or surface water.

2235

VARIANCE / FIELD CHANGE NOTICE

V/FCN 20810-PSP-0002-2

WBS NO.: ECDC #20810-PSP-0002 Rev. 0

Page 2 of 2

PROJECT TITLE: PSP for Area 3 Pre-Design Investigation of Potentially Characteristic Areas

Date: 2/10/98

4. CHANGE:

A subsurface concrete pad or obstruction was encountered at locations SM24, SM25, and SM26 which prevented the collection of the following archive samples:

A3-SM24-7-V (3-3.5 feet), A3-SM25-5-V (2-2.5 feet), A3-SM25-7-V (3-3.5 feet), A3-SM26-5-V (2-2.5 feet), and A3-SM26-7-V (3-3.5 feet).

JUSTIFICATION:

The obstruction made it impractical to penetrate deeper since these locations could only be completed by manual methods due to penetration permit restrictions (nearby utilities).

5. CHANGE:

Seven feet of soil core was planned to be collected from sample location SM37. Because the sample location was covered with 5.8 feet of gravel and due to the perched water in the area, 3.5 feet of soil will be collected instead.

JUSTIFICATION:

The sample location was identified for 7 feet of soil core to be collected because previous analytical results in the area indicated above-FRL concentrations of uranium to a depth of 3.9 feet. It is thought that the depth of this contamination was measured from the ground surface (including the gravel). Therefore, by collecting 3.5 feet of soil after 5.8 feet of gravel, the actual depth of soil samples will be from 5.8 to 9.3 feet below ground surface. This will meet the initial goal of collecting a sample at 7-foot depth.

6. CHANGE:

Section 2.1 of the PSP presents the procedure for establishing a total lead screening level to determine which sample locations warrant additional TCLP analysis. The bullets at the bottom of page 2-1 are changed to read:

- If all samples from an area pass TCLP testing, the screening level will be the highest total lead result from a TCLP sampling location or the 20-times rule threshold, whichever is higher.
- If some of the samples from an area pass TCLP testing, the screening level will be the highest total lead result associated with a passing TCLP location or the 20-times rule threshold, whichever is higher.

JUSTIFICATION:

When the PSP was written, total lead results were not expected to be greatly different from original RI/FS results, which were greater than the 20-times rule threshold. Therefore the screening levels were established at the highest total lead result associated with a passing TCLP location - with the expectation that the new total lead results would also be greater than the 20-times threshold. Analytical results from the KC-2 Warehouse area and the area north of the Maintenance Building show that the new total lead concentrations are much lower than the original RI/FS results. If the current PSP was followed, additional TCLP analysis would have to be performed on samples with total lead results as low as 15 mg/kg. Because no sample with total lead results lower than the 20-times rule threshold could fail TCLP analysis, the procedure for establishing the total lead screening level is being modified.

REQUESTED BY: Christine Messerly

DATE: 2/10/98

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
	QUALITY ASSURANCE <i>[Signature]</i>	2-11-99	X	PROJECT MANAGER <i>[Signature]</i>	2/16/99
	DATA QUALITY MANAGEMENT			Real-time Program Mgr	
	ANALYTICAL CUSTOMER SUPPORT		X	Characterization Lead <i>[Signature]</i>	2/11/99
	Sampling Team Manager <i>[Signature]</i>	2/16/99		WAG	
VARIANCE/FCN APPROVED [X]YES []NO			REVISION REQUIRED: []YES [x]NO		

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:

34

2235

VARIANCE / FIELD CHANGE NOTICE

20310-PSP-0001-1

WBS NO.: 20310-PSP-0001

Page 1 of 2

PROJECT TITLE: Real Time Inst. Meas. Prog. WAC Attainment Scanning Misc. Areas PSP

Date 3/30/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

Justification

This variance is being written to comply with the requirement in Section 3.0 of the PSP to document the field activity.

Field Change Notice

1 - Real-time surface soil characterization for potential WAC attainment is being performed under this variance on the soils in the footprint of the former Coal Pile area and the immediately surrounding area. This area is soon to become a construction lay-down area and will be inaccessible for WAC characterization for an undisclosed period of time. No Area 3 WAC attainment PSP is currently approved for this area (predesign is still in the planning stages), therefore this work will be performed under the RTIMP WAC Attainment Scanning in Miscellaneous Areas PSP. The area under investigation is shown on Page 2 of this variance.

2 - The RSS is to be used to collect data in the former Coal Pile area in A3A of the former process plant. The area extends from the south end of the former Coal Pile area to the Haul Road on the north end. The north end is bordered on the east by Soil Pile 1 and on the west by Soil Pile 4.

3 - The numbering system to be used for the RSS runs will be:
A3A-CP-WAC-Run number

where:

A3A = Area 3 A Former Process Plant

CP = Former Coal Pile area

WAC = Waste Acceptance Criteria

Run number = Next consecutive Run number in the RSS log

INFORMATION
ONLY

5- The measurements collected under this PSP will reference this PSP number.

Requested by: Joan White

Date: 3/29/1999

X IF	VARIANCE/FAN APPROVAL	DATE	X IF REQD	VARIANCE/FAN APPROVAL	DATE
X	QUALITY ASSURANCE <i>082</i>	3/31/99	X	PROJECT MANAGER <i>C. M. Moxley</i>	3/30/99
	DATA QUALITY MANAGEMENT		X	Real-time Program Mgr <i>Joan White</i>	3/30/99
	ANALYTICAL CUSTOMER SUPPORT		X	WAO <i>Vicky L. Zimmerman</i>	3/30/99
	OTHER			OTHER	

VARIANCE/FCN APPROVED [X] YES [] NO

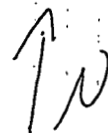
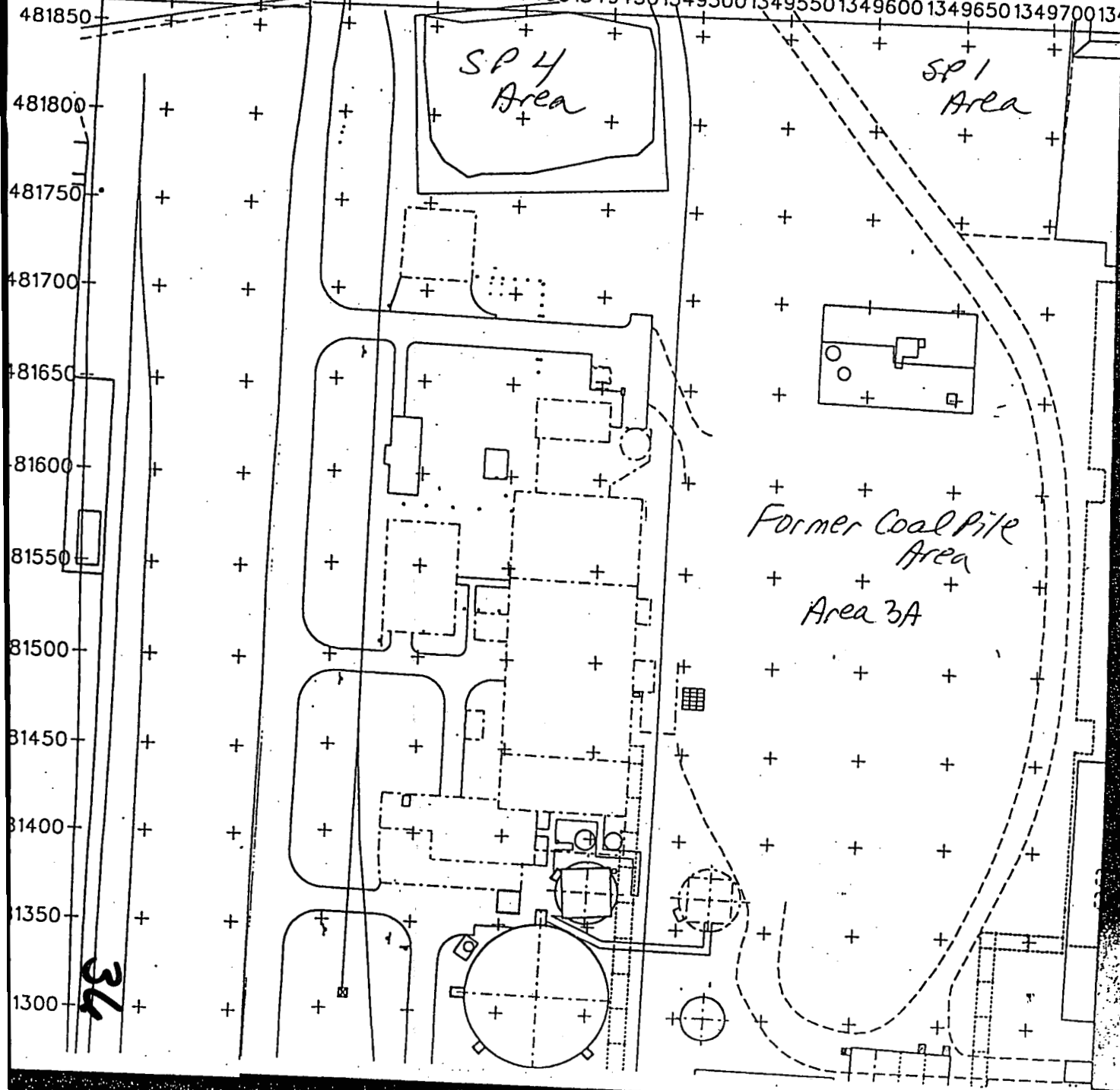
REVISION REQUIRED: [] YES [x] NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL:	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:

35

13492001349250134930013493501349400134945013495001349550134960013496501349700134



Variance
20310-PSP-0001-1
pg 2 of 2
3/30/99
Real time Soil Scan
Former Coal Pile Area
A3A

2235

2235

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL

162178
ROSS9966

To: NICKEL, KATHY
Control No: **INFO**
Location/Mail Stop: 45
From: ECDC

Date: 03/25/99

FOLLOW INSTRUCTIONS BELOW
VARIANCE/FIELD CHANGE NOTICE

Project	CWO	Document No	Rev	Title of Document	Comments
20300 VARIANCE		20.03.13.06-20	0	PSP FOR EXCAVATION CHARACTERIZATION FOR INACTIVE FLYASH PILE AND SP5	INFORMATION ONLY

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37

VARIANCE / FIELD CHANGE NOTICE

V/FCN 20.03.13.06-20

WBS NO.: PROJECT/DOCUMENT 20.03.13.06, ECDC #20300-PSP-0004 Rev1.

Page 1 of 1

PROJECT TITLE: PSP for Excavation Characterization for Inactive Flyash Pile and SP5

Date: 3/24/99

VARIANCE / FIELD CHANGE NOTICE (Include Justification):

Section 2.8 (Miscellaneous Field Sampling) Variance/Field Change Notice (V/FCN) 20.03.13.06-06 requires documentation of the following field sampling.

Upon excavation of the IFP-13 lift area at the IFP-13-3 sample location (Northing 477907.7 and Easting 1347516.2), additional sampling was necessary to further delineate the excavation depth. Excavation in this area was approximately 5 feet, which was based on verbal approval from Ohio EPA to excavate deeper than usual 3 +/- 1 foot at this location.

Soil samples were taken at the above location using a hand-auger to a depth of five and one half feet. Deeper sampling was not possible since the borehole collapsed at this point. The sampling team labeled the samples and briefly provided a visual description of each six-inch interval on the Field Activity/Sample Collection Log. The boring location was identified as IFP-13-3A with each six-inch sample interval being subsequently numbered (i.e. 0-0.5 ft = 1, 0.5-1 ft = 2, 1-1.5 ft = 3, etc). For example, the first interval of the IFP-13-3A core was marked IFP-13-3A-1.

Since borehole collapse occurred, it was not necessary to plug the borehole using granular or pelletized bentonite and water for hydration. Borehole abandonment was documented on a Borehole Abandonment Log.

All intervals (IFP-13-3A-1 through IFP-13-3A-9) from the boring were containerized (using 500 ml glass or plastic containers) by the sampling team and submitted for total uranium analysis by ICP/MS methodology at ASL B (with MDC < 10 ppm). The lab sample identification will consist of adding the suffix "-R" to the core interval identification (i.e. IFP-13-3A-1-R).

INFORMATION
ONLY

Justification:

1. Section 2.8 allows for the collection of physical samples.
2. Additional information was required after the IFP-13 lift to bound contamination at the former IFP-13-3 location and to determine if additional excavation may be required prior to precertification measurements.

REQUESTED BY: Mike RolfesDATE: 3/24/99

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>D. Hinkle</i>	3/24/99	X	PROJECT MANAGER <i>Michael J. Rolfes</i>	3-24-99
	DATA QUALITY MANAGEMENT		X	REAL TIME PROGRAM MANAGER <i>Michael J. Rolfes</i>	3/24/99
X	ANALYTICAL CUSTOMER SUPPORT <i>Bill Whiteman</i>	3/25/99	X	CHARACTERIZATION LEAD <i>Michael J. Rolfes</i>	3/24/99
X	SAMPLING TEAM MANAGER <i>Mike Rolfes</i>	3/24/99	X	WAO <i>David Lockard</i>	3/24/99
VARIANCE/FCN APPROVED [X]YES []NO			REVISION REQUIRED: []YES [x]NO		

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER: 38
QUALITY ASSURANCE:	OTHER:	OTHER:

2235

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL167986
DRAG8938

To: NICKEL, KATHLEEN A
Control No: **VA10459**
Location/Mail Stop: 45

Date: 04/29/99

From: ECDC

FOLLOW INSTRUCTIONS BELOW
VARIANCE ON 20460-PSP-0001 R/0

Project	CWO	Document No	Rev	Title of Document	Comments
20460 VARIANCE		20460PSP1-06	0	PSP FOR THE AREA 2, PHASE III PRECERTIFICATION REAL-TIME SCAN	INFORMATION ONLY

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Signature

Date

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4595

39

VARIANCE / FIELD CHANGE NOTICE

V/FCN 20460PSP1-6

WBS NO.: PROJECT/DOCUMENT/ECDC #20460-PSP-0001 Rev 0

Page 1 of 1

PROJECT TITLE: PSP for the Area 2, Phase III Precertification Real-Time Scan

Date: 4/27/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

1) Add technetium-99 as an analyte for the physical sampling and analysis effort documented in Variance/Field Change Notice (V/FCN) 20460PSP1-4. The analysis will be to ASL B by the gas proportional counting method at the on-site lab with an MDC of 2.0 pCi/g.

2) The radiological surveying of the soil cores will also include alpha frisking. Any intervals which exhibit activity greater than 20 disintegrations per minute (dpm) per 100 cm² removable or 100 dpm/100 cm² average fixed plus removable with the alpha frisker will be submitted for analysis.

3) After the soil cores are collected, the plastic core sleeves will be capped in the field and transported to a controlled area in the trailer-305 (T-305). Once in T-305, the core sleeves will be opened to allow for drying and radiological surveying of the soil. Once the core sleeves are opened, a clean sheet of plastic will be draped over the cores to minimize any cross-contamination.

The cores will be preliminarily identified with a "COREX" suffix where CORE stands for the preliminary status of the core sleeve and X stands for the sequential number of the core for that boring location. For example, A2P3-RA-1-CORE1 is the first core taken at the A2P3-RA-1 boring location. The sample identification described in V/FCN # 20460PSP-4 will then apply once the discrete, six-inch interval samples are containerized after drying and surveying.

INFORMATION
ONLYJustification

1) Historical aerial photos from 1954 show a potential construction road leading from the current location of the old sewage treatment plant (STP) to the radium-226 hot spot area in Area 2 Phase III. Due to the presence of technetium-99 in the STP, DOE has requested to analyze for Technetium-99.

2) Radium-226 and Thorium-230 are alpha emitters and require frisking for radiological control requirements. The 20 dpm activity is a radiological control threshold for free release and this activity will also be used as a trigger for submittal for analysis.

3) The potential high moisture content of the surface soil due to recent rain events may cause shielding to the alpha frisking in the field. Drying of the soil core will allow for a more accurate alpha frisk.

REQUESTED BY: Mike RolfesDATE: 4/27/99

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>B. D. V. [Signature]</i>	4/28/99	X	A2P3 PROJECT MANAGER <i>[Signature]</i>	4-27-99
X	DATA QUALITY MANAGEMENT <i>[Signature]</i>			Real-time Program Mgr	
X	ANALYTICAL CUSTOMER SUPPORT <i>[Signature]</i>	4/29/99	X	A2P3 Characterization <i>[Signature]</i>	4/27/99
X	Sampling Manager <i>[Signature]</i>	4-27-99	X	WAO <i>[Signature]</i>	4/27/99
VARIANCE/FCN APPROVED [X]YES []NO			REVISION REQUIRED: []YES [x]NO		
DISTRIBUTION					
PROJECT MANAGER:		DOCUMENT CONTROL: Jeannie Rosser		OTHER:	
QUALITY ASSURANCE:		OTHER:		OTHER:	

40

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL

2235

166068
DRAG8938

To: NICKEL, KATHLEEN A
Control No: VA10459
Location/Mail Stop: 45

Date: 04/21/99

From: ECDC

FOLLOW INSTRUCTIONS BELOW
VARIANCE ON PSP 20460-PSP-0001 R/O

Project	CWO	Document No	Rev	Title of Document	Comments
20460 VARIANCE		20460PSP1-05	0	PSP FOR THE AREA 2, PHASE III PRECERTIFICATION REAL-TIME SCAN	INFORMATION ONLY

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41

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4595

2235

VARIANCE / FIELD CHANGE NOTICE

V/FCN 20460PSP1-5

WBS NO.: PROJECT/DOCUMENT/ECDC #20460-PSP-0001 Rev 0

Page 1 of 1

PROJECT TITLE: PSP for the Area 2, Phase III Precertification Real-Time Scan

Date: 4/19/99

VARIANCE / FIELD CHANGE NOTICE (Include Justification):

Modify Section 2.4 of the PSP to clarify the identification of Phase I measurements of road easement areas.

Under Section 2.4, Precertification Phase 1: Item 3, after "Acre identification or stockpile number or tributary/wooded/vegetated areas or road and road-like surfaces:" add "or road easement areas:" and under definition, add "or South Access Road = SAR and Willey Road = WR". For example:

A2P3-P1-SAR-249

Where: A2P3 = Area 2 Phase III
P1 = Precertification Phase I
SAR = South Access Road
249 = sequential RTRAK/RSS batch number

Note that when measuring road easement areas, the edge of the gamma detector's field of view should be as close to the edge of the paved road as can be safely acquired. Any measurements obtained in the open field vegetated areas will continue to use the acreage identification per PSP.

Justification:

The length of these road easement areas span many acreage identification areas and should be identified separately to facilitate data collection. Changing the identification scheme does not compromise any data collection or management.

INFORMATION ONLY

REQUESTED BY: Mike Rolfes

DATE: 4/19/99

X IF REQD.	VARIANCE/FCN APPROVAL	DATE	X IF REQD.	VARIANCE/FCN APPROVAL	DATE
	QUALITY ASSURANCE <i>Frank Thompson</i>	4-20-99	X	PROJECT MANAGER <i>John L. H. ...</i>	4-19-99
	DATA QUALITY MANAGEMENT		X	REAL-TIME PROGRAM MANAGER <i>John H. ...</i>	4/19/99
	ANALYTICAL CUSTOMER SUPPORT		X	CHARACTERIZATION LEAD <i>David ...</i>	4/20/99
	SAMPLING TEAM MANAGER		X	WAO <i>David Lock</i>	4/19/99

VARIANCE/FCN APPROVED ☒ YES ☐ NOREVISION REQUIRED: ☐ YES ☒ NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Jeannie Rosser	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:

42

2235

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL165681
ODON6550

To: NICKEL, KATHLEEN A
Control No: VA10459
Location/Mail Stop: 45
From: ECDC

Date: 04/19/99

FOLLOW INSTRUCTIONS BELOW
VARIANCE TO 20460-PSP-0001 REV 0

Project	CWO	Document No	Rev	Title of Document	Comments
20460 VARIANCE		20460PSP1-04	0	PSP FOR THE AREA 2, PHASE III PRECERTIFICATION REAL-TIME SCAN	INFORMATION ONLY

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Date

IF TERMINATION OR TRANSFER OCCURS, NOTIFY ECDC PROJECT DOCUMENT CONTROL AT
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43

2285

VARIANCE / FIELD CHANGE NOTICE

V/FCN 20460PSP1-4

WBS NO.: PROJECT/DOCUMENT/ECDC #20460-PSP-0001 Rev 0

Page 1 of 1

PROJECT TITLE: PSP for the Area 2, Phase III Precertification Real-Time Scan

Date: 4/15/99

VARIANCE / FIELD CHANGE NOTICE (Include Justification):

In Variance/Field Change Notice (V/FCN) 20460PSP1-3, the approach for confirmation and lateral delineation of a radium-226 hot spot area was documented. This V/FCN documents the approach for vertical delineation of the radium-226 hot spot area to assist in design of the remediation. The vertical delineation approach consists of physical soil sampling, radiological surveying of the soil sample core, laboratory analysis, and data validation.

Since the HPGe and RSS measurements detected elevated surface concentrations, physical sample borings will be advanced to a minimum of 3.5 foot depth per Section 3.1.3 of the SEP or until the lithology of the soil is determined to be native material. Soil samples will be collected at the following locations using Geoprobe equipment.

HPGe ID	Boring Location	Northing	Easting
A2P3-PI-27C-6-G	A2P3-RA-1	478435.0	1349228.2
A2P3-PI-27B-2-G	A2P3-RA-2	478462.2	1349408.1
A2P3-PI-27C-1-G	A2P3-RA-3	478432.4	1349307.0
A2P3-PI-24A-28-G	A2P3-RA-4	478364.7	1349340.9
A2P3-PI-24D-21-G	A2P3-RA-5	478304.2	1349221.6
A2P3-PI-24D-11-G	A2P3-RA-6	478367.0	1349262.9
A2P3-PI-24D-19-G	A2P3-RA-7	478231.2	1349259.8

The sampling team will open the Geoprobe core sleeves and beta-gamma frisk each six-inch interval, documenting the activity for each interval on the Field Activity Log (FAL). The interval with the most elevated beta/gamma measurement will be containerized and submitted for analysis. The remaining intervals will be archived for a maximum of 6 months for potential future analysis. If no core interval exhibits a beta/gamma measurement greater than 100 corrected counts per minute (ccpm), the first interval (0-0.5') will be submitted for analysis. Each six-inch sample interval will be subsequently numbered (i.e. 0-0.5 ft = 1, 0.5-1 ft = 2, 1-1.5 ft = 3). Bentonite will be used to plug the borehole and the process will be documented on a Borehole Abandonment Log. Lithology will be described by a geologist on a lithology log.

The collected soil sample intervals will be containerized (using 500 ml glass or plastic containers) by the sampling team and submitted for radium-226 and potassium-40 analysis by gamma spec and thorium-230 by alpha spec at ASL B (with an MDC of 0.2 pCi/g for radium-226 and thorium-230 and 0.5 pCi/g for potassium-40) to the on-site lab. The lab sample identification will consist of adding the suffix "-R" to the core interval identification (i.e. A2P3-RA-1-1-R). The remainder of the core intervals will be archived for potential analysis at a later date and designated with a "-V" suffix. Field validation for the sampling event is required along with data validation to ASL B.

Justification:

Investigation of the vertical depth of the contamination is needed to assist with design of the excavation. Thorium-230 was added as an analyte because it is typically found with radium-226 (both are uranium daughters). Thorium-230 is predominantly an alpha emitter and is not easily quantified by an HPGe.

REQUESTED BY: Mike Rolfes

DATE: 4/15/99

INFORMATION
ONLY

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>John Thompson</i>	4/19/99	X	A2P3 PROJECT MANAGER <i>John L. G. Thompson</i>	4-19-99
	DATA QUALITY MANAGEMENT			Real-time Program Mgr	
X	ANALYTICAL CUSTOMER SUPPORT <i>Bill Whisteryan</i>	4/15/99	X	A2P3 Characterization Lead <i>Bill Whisteryan</i>	4/15/99
X	Sampling Manager <i>Mike Rolfes</i>	4-15-99	X	WAO <i>David L. Rolfes</i>	4/15/99
VARIANCE/FCN APPROVED [X]YES []NO			REVISION REQUIRED: []YES [x]NO		

ORIGINAL

44

2235

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL

164337
ROSS9966

To: NICKEL, KATHLEEN A
Control No: **VA10459**
Location/Mail Stop: 45
From: ECDC

Date: 04/08/99

FOLLOW INSTRUCTIONS BELOW
VARIANCE FOR AREA 2, PHASE III PRECERTIFICATION

Project	CWO	Document No	Rev	Title of Document	Comments
20460 VARIANCE		20460PSP1-03	0	PSP FOR THE AREA 2, PHASE III. PRECERTIFICATION REAL-TIME SCAN	INFORMATION ONLY

As a controlled document holder, you are required to destroy any old revisions of this document. Sign and date below, verifying receipt of these documents. **Return this record of receipt to ECDC PROJECT DOCUMENT CONTROL, 52-7.** Return receipt within ten (10) days of transmittal date.

Signature

Date

IF TERMINATION OR TRANSFER OCCURS, NOTIFY ECDC PROJECT DOCUMENT CONTROL AT
4595

45

VARIANCE / FIELD CHANGE NOTICE

V/FCN 20460PSP1-3

WBS NO.: PROJECT/DOCUMENT/ECDC #20460-PSP-0001 Rev 0

Page 1 of 3

PROJECT TITLE: PSP for the Area 2, Phase III Precertification Real-Time Scan

Date: 4/7/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

1) Modify Section 2.2 of the PSP to clarify the requirement for Phase 2 HPGe measurements. Add the following text after the last sentence of the first paragraph on page 2-3:

"If HPGe measurements were taken in lieu of RTRAK or RSS measurements during Phase 1 in a CU and no potential hot spots were identified, no additional HPGe measurements in that CU are required for Phase 2."

2) Change example on page 2-6 from "A2P3-P1-RADONN-A-1" to "A2P3-P1-RADON-A-1".

3) 21 Phase I HPGe measurements in the acre areas identified as 24 and 27 had radium-226 results greater than 1XFRL. Since the contamination pattern was concentrated and some of the results were elevated well beyond 3XFRL, an abbreviated confirmation approach was developed that deviates from the PSP and Users manual. One 31 cm HPGe measurement was collected at each of the following locations and concentration ranges: 1XFRL (A2P3-P1-27B-2-G), 2XFRL (A2P3-P1-24D-17-G), and 3XFRL (A2P3-P1-24D-19-G). The results of these 31 cm measurements confirmed these concentration ranges, and, thus, the 15 measurements with greater than 2XFRL radium-226 are considered hot spots. The results of these 15 measurements and the 3 confirmation measurements are attached.

4) The real-time delineation approach, approved by the SCEP Project Manager, deviates from the suggested process depicted in the Users Manual and consisted of an RSS scan over the hot spot area. The contour of the total activity concentrations from the RSS demonstrated a homogenous, elevated footprint of activity and provided sufficient delineation of the hot spot footprint. No further delineation with HPGe measurements is necessary. A map of the elevated footprint area is attached.

ECDC CONTROLLED
COPY NO.

VA10459

Individual HPGe measurements would not provide any further lateral boundary delineation.

PD mrr

Justification:

1. Clarification of the requirement for Phase II HPGe measurements.
2. Correction of previous typographical error.
3. Due to the consistent, elevated radium-226 concentrations within the contamination footprint, an abbreviated Phase II confirmation process is sufficient.
4. Section 2.3 of PSP requires documentation of the delineation process if it conflicts with the Users Manual.

REQUESTED BY: Mike Rolfes

DATE: 4/7/99

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
<input checked="" type="checkbox"/>	QUALITY ASSURANCE <i>Mike</i>	4-7-99	<input checked="" type="checkbox"/>	A2P3 PROJECT MANAGER <i>Michael J. Zosher</i>	4-7-99
<input checked="" type="checkbox"/>	DATA QUALITY MANAGEMENT		<input checked="" type="checkbox"/>	Real-time Program Mgr <i>David L. Eckerd</i>	4/7/99
<input checked="" type="checkbox"/>	ANALYTICAL CUSTOMER SUPPORT		<input checked="" type="checkbox"/>	A2P3 Characterization Lead <i>David L. Eckerd</i>	4/7/99
<input checked="" type="checkbox"/>	SCEP Project Manager <i>Mike Rolfes</i>	4/7/99	<input checked="" type="checkbox"/>	WFO <i>David L. Eckerd</i>	4/8/99

VARIANCE/FCN APPROVED [X]YES []NO

REVISION REQUIRED: []YES [x]NO

DISTRIBUTION

96

PROJECT MANAGER:

DOCUMENT CONTROL: Jeannie Rosser

OTHER:

2235

V/FCN 20460PSP1-3
page 2 of 3

HPGe Measurement ID	Detector Height	RADIUM-226 (pCi/g)
A2P3-P1-24D-21-G	100 cm	13.52
A2P3-P1-24D-3-G	100 cm	13.15
A2P3-P1-24D-11-G	100 cm	12.43
A2P3-P1-24D-19-G	100 cm	10.65
A2P3-P1-24D-12-G	100 cm	10.34
A2P3-P1-24D-13-G	100 cm	9.90
A2P3-P1-24D-10-G	100 cm	8.96
A2P3-P1-24D-14-G	100 cm	8.70
A2P3-P1-27C-1-G	100 cm	6.66
A2P3-P1-27C-2-G	100 cm	4.31
A2P3-P1-24D-17-G	100 cm	4.21
A2P3-P1-24D-2-G	100 cm	3.91
A2P3-P1-24D-22-G	100 cm	3.87
A2P3-P1-24D-4-G-D	100 cm	3.81
A2P3-P1-24D-4-G	100 cm	3.66
A2P3-P2-16-1B-G	31 cm	3.96
A2P3-P2-16-2B-G	31 cm	2.26
A2P3-P2-16-3B-G	31 cm	14.09

Figure 1-3

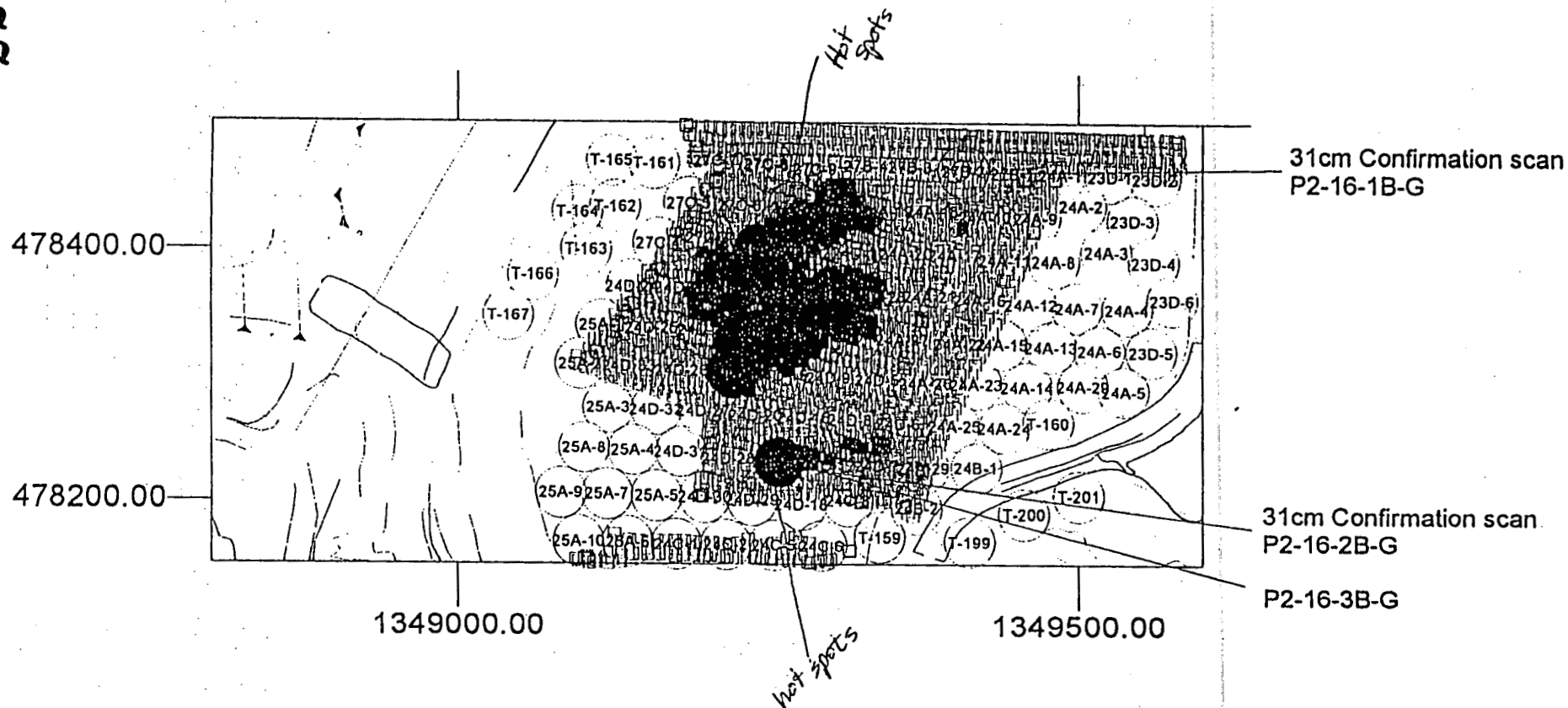
V/FCW
20460PSP1-3
page 3 of 3
48

A2P111 Phase 1 Radium 226 Hot Spots Moisture and radon corrected Radium 226 (pCi/gm)

RSS results are two point running average

N

2235



- Ra-226 (pCi/gm)
- 0.00 to 1.70
 - 1.70 to 3.40
 - 3.40 to 5.10
 - 5.10 to 10000.00

RTIMP DWG Title: A2P3-P1-RAHS-1PT-MC
Project no.: 20460-PSP-0001
Project name: A2P3 PRECERT
Prepared by: David Allen
File: A2P3_P1_RAHS_1PT_MC.srf
Date prepared: 3/30/00

VARIANCE / FIELD CHANGE NOTICE

2235

V/F 20.03.13.04-8

WBS NO.: PROJECT/DOCUMENT NUMBER 20.03.13.04, ECDC 20402-PSP-0001 REV. 0

Page 1 of 1

PROJECT TITLE: PSP for Lead Delineation in the A2PI Firing Range

Date: 3/16/99

VARIANCE / FIELD CHANGE NOTICE (Include Justification):

Change the incorrect sample location ID and lab sample ID documented in Variance/Field Change Notice (V/FCN) 20.03.13.04-7 to the correct identifiers listed below.

Incorrect Sample Location ID	Incorrect Lab Sample ID	Correct Sample Location ID	Correct Lab Sample ID
A2PIPB-31	A2PIPB-31-7-R	A2PIPB-35	A2PIPB-35-9-R
A2PIPB-32	A2PIPB-32-1-R	A2PIPB-36	A2PIPB-36-1-R
A2PIPB-33	A2PIPB-33-4-R	A2PIPB-37	A2PIPB-37-4-R
A2PIPB-34	A2PIPB-34-2-R	A2PIPB-38	A2PIPB-38-2-R

Also take additional material and containerize for alpha/beta analysis at the on-site lab for each sample. per 3-16-99

Justification:

1) Previous predesign samples were taken with duplicate identification. This correction is necessary to fix the error.

REQUESTED BY: Mike Rolfes

Date: 3/15/99

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>D. Justice</i>	3-16-99	X	CHARACTERIZATION LEAD <i>Michael Rolfes</i>	3/16/99
	DATA QUALITY MANAGEMENT		X	PROJECT MANAGER <i>Mike Rolfes</i>	3-16-99
X	ANALYTICAL CUSTOMER SUPPORT <i>Bill Ahlstrom</i>	3/17/99		WAO	
	OTHER		X	OTHER <i>Sam [unclear]</i>	3/16/99
VARIANCE/FCN APPROVED [X] YES [] NO			REVISION REQUIRED: [] YES [x] NO		

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL:	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

INFORMATION
ONLY

49

2235

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL157564
DRAG8938

To: NICKEL, KATHLEEN A
Control No: NA
Location/Mail Stop: 45
From: ECDC

Date: 02/22/99

FOLLOW INSTRUCTIONS BELOW
VARIANCE ON 20402-PSP-0001

Project	CWO	Document No	Rev	Title of Document	Comments
20402 VARIANCE		20.03.13.04-06	0	PSP FOR LEAD DELINEATION IN THE AREA 2 PHASE I FIRING RANGE	INFORMATION ONLY

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Signature

Date

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4595

50

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VARIANCE / FIELD CHANGE NOTICE

V/FCN 20.03.13.04-6

WBS NO.: PROJECT/DOCUMENT 20.03.13.04, ECDC #20402-PSP-0001 Rev 0.

Page 1 of 1

PROJECT TITLE: PSP for Lead Delineation in the A2PI Firing Range

Date: 2/18/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

Add to Section 2.4 RADIOLOGICAL FIELD SURVEY the following:

Radiological field surveys (HPGe - high purity germanium detector system) may be requested (by the Characterization Lead or designee) to confirm the presence of radioactive contamination in the A2PI firing range area.

HPGe measurements will be performed in accordance with DQO SL-049 (Section 7.0). The measurements will be taken at a detector height of 1 meter and a count time of 15 minutes. Northing (Y), Easting (X), and elevation (Z) coordinate values (Ohio South Zone, #3402) will be determined using standard survey practices and standard positioning instrumentation [electronic total stations and Global Positioning System (GPS) receivers]. In addition, background radon monitoring will be performed during these measurements.

For HPGe measurement identification, use SF-PB-X-G or D:

where SF is South Field, PB is Lead-Contaminated Area, X is sequential designator beginning with 1, 2, etc., G is gamma measurement, and D is duplicate (if used). *RA 2/18/99*

For background radon HPGe measurement, use SF-PB-RADON-1:

where RADON is radon monitoring.

Justification:

The data from these measurements will assist in determining the type of waste container required, transportation requirements and disposition of the lead contaminated soil.

INFORMATION ONLY

REQUESTED BY: Mike Rolfes

DATE: 2/18/99

IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
	QUALITY ASSURANCE <i>RA</i>	2-19-99	X	PROJECT MANAGER <i>RA</i>	2-22-99
	DATA QUALITY MANAGEMENT		X	Real-time Program Mgr <i>Thel</i>	2-22-99
	ANALYTICAL CUSTOMER SUPPORT		X	Characterization Lead <i>WAO</i>	2/19/99
			X	WAO <i>WAO</i>	2/22/99
VARIANCE/FCN APPROVED [X]YES []NO			REVISION REQUIRED: []YES [x]NO		

DISTRIBUTION

PROJECT MANAGER:

DOCUMENT CONTROL: Jeannie Rosser

OTHER:

QUALITY ASSURANCE:

OTHER:

OTHER:

51

2235

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL

159052
ROSS9966

To: NICKEL, KATHY Date: 03/04/99
Control No: **INFO**
Location/Mail Stop: 45
From: ECDC

FOLLOW INSTRUCTIONS BELOW
VARIANCE

Project	CWO	Document No	Rev	Title of Document	Comments
20300 VARIANCE		20.03.13.06-18	0	PSP FOR EXCAVATION CHARACTERIZATION FOR INACTIVE FLYASH PILE AND SP5	INFORMATION ONLY

As a controlled document holder, you are required to destroy any old revisions of this document. Sign and date below, verifying receipt of these documents. **Return this record of receipt to ECDC PROJECT DOCUMENT CONTROL, 52-7.** Return receipt within ten (10) days of transmittal date.

Signature

Date

IF TERMINATION OR TRANSFER OCCURS, NOTIFY ECDC PROJECT DOCUMENT CONTROL AT
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52

2235

VARIANCE / FIELD CHANGE NOTICE

V/FCN 20.03.13.06-18

NBS NO.: PROJECT/DOCUMENT 20.03.13.06, ECDC #20300-PSP-0004 Rev1.

Page 1 of 2

PROJECT TITLE: PSP for Excavation Characterization for Inactive Flyash Pile and SP5

Date: 3/03/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

Section 2.8 (Miscellaneous Field Sampling) Variance/Field Change Notice (V/FCN) 20.03.13.06-06 requires documentation of the following field sampling.

Supplemental to V/FCN 20.03.13.06-16, additional verification of the IFP-13 lift excavation boundary is required and includes additional physical sampling at the following HPGc measurement locations: IFP-13-24-G (Northing 477708 and Easting 1347616), IFP-13-25-G (Northing 477708 and Easting 1347716), and IFP-13-26-G (Northing 477793 and Easting 1347716). The attached map depicts these locations.

Soil samples will be taken at each of the above locations using hand-auger, Geoprobe or Geoprobe equipment to a depth of four feet. The sampling team will label the samples or Geoprobe core sleeves and briefly provide a visual description of each six-inch interval on the Field Activity or Sample Collection Log. The boring locations will be identified as IFP-13-24, IFP-13-25, and IFP-13-26 with each six-inch sample interval being subsequently numbered (i.e. 0-0.5 ft=1, 0.5-1 ft=2, 1-1.5 ft=3, etc). For example, the first interval of the IFP-13-24 core would be marked IFP-13-24-1. If used, the plastic sleeved cores will be wiped down and radiologically monitored (with any elevated readings noted on the plastic sleeves) out of the controlled area for sample container separation and archiving.

The borehole will be plugged using granular or pelletized bentonite and water for hydration. If borehole collapse occurs, no bentonite will be necessary. Borehole abandonment will be documented on a Borehole Abandonment Log.

The first two intervals (IFP-13-24/25/26-1 and IFP-13-24/25/26-2) from each boring will be containerized (using 500 ml glass or plastic containers) by the sampling team and submitted for total uranium analysis by ICP/MS methodology at ASL B (with MDC < 10 ppm). The lab sample identification will consist of adding the suffix "-R" to the core interval identification (i.e. IFP-13-24-1-R). The remainder of the core intervals will be archived for potential analysis at a later date.

Justification:

1. Section 2.8 allows for the collection of physical samples.

REQUESTED BY: Mike Rolfes

DATE: 3/03/99

IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
	QUALITY ASSURANCE <i>D. Hulse</i>	3-4-99	X	PROJECT MANAGER <i>Sh. L. CH.</i>	3-4-99
	DATA QUALITY MANAGEMENT			Real-time Program Mgr	
	ANALYTICAL CUSTOMER SUPPORT <i>Bill Winterman</i>	3/4/99	X	Characterization Lead <i>Michael J. Ziegler</i>	3-4-99
	Sampling Team Manager <i>Mike Rolfes</i>	3/4/99		WAO	
VARIANCE/FCN APPROVED (X)YES ()NO			REVISION REQUIRED: ()YES (x)NO		
DISTRIBUTION					
PROJECT MANAGER:		DOCUMENT CONTROL: Jeannie Rossar		OTHER:	
QUALITY ASSURANCE:		OTHER:		OTHER:	

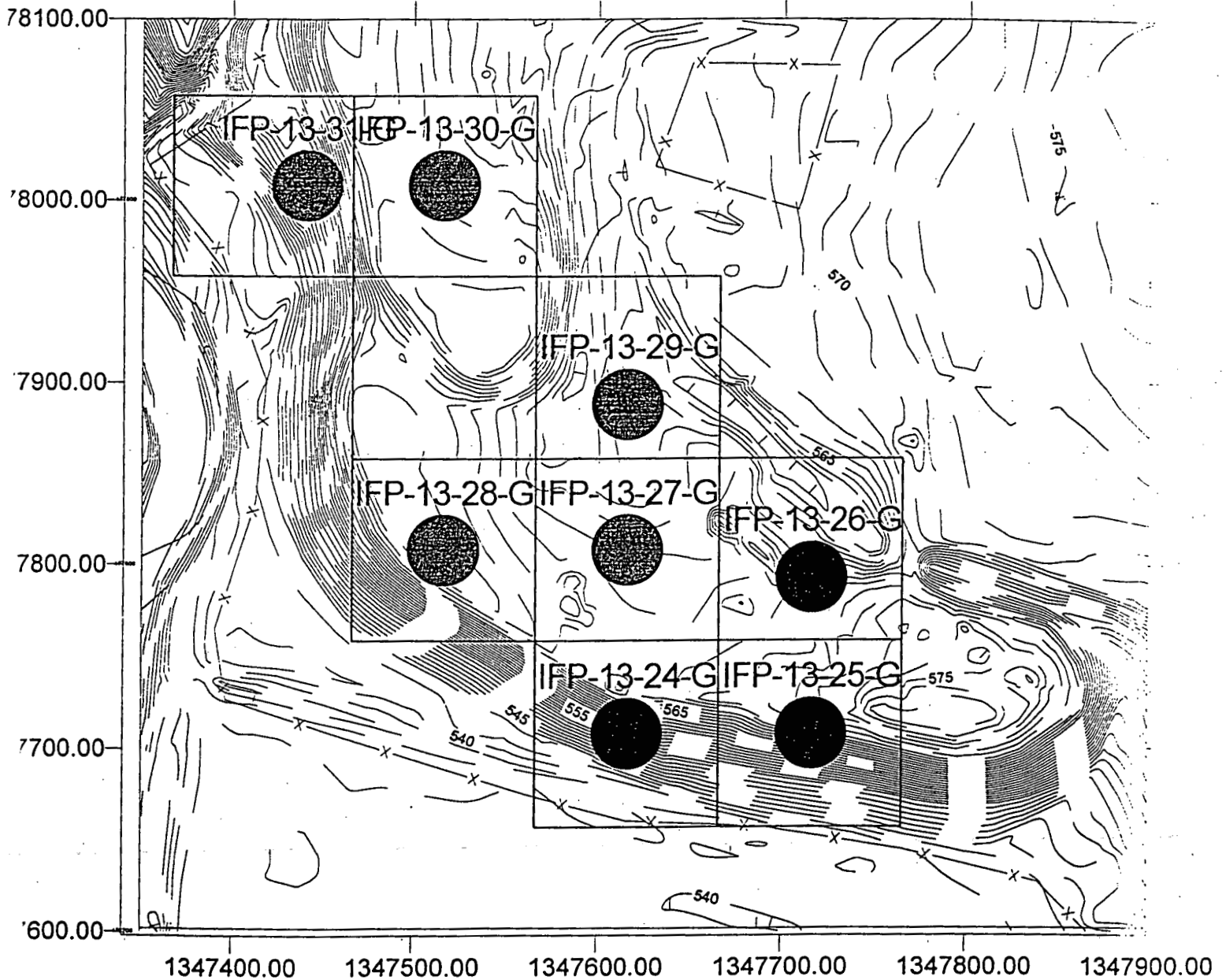
53

2235

✓/FCN 20.03.13.06-18

pg 2 of 2

Inactive Flyash Pile Moisture Corrected Total Uranium
HPGE Detectors 30716, 30904, & 31144
Single Spectra in ppm
Coverage Plot (Field of View, 6 m radius HPGE)
Measurement Date: 2/25/99



Legend
ppm Uranium

- 0.00 to 10.00
- 10.00 to 20.00
- 20.00 to 10000.00

RTIMP DWG Title: IFP-13-2-25-99-TU-1PT-MC
Project #: 20300-PSP-0004
Lift ID: IFP-13
Project Name: Exc Char of IFP & SP5
Prepared By: David Allen
File: IFP_13_2-25-99_TU_1PT_MC.srf
Date Prepared: 2/25/99

54

2235

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL151910
DRAG8938

To: NICKEL, KATHY Date: 01/13/99
Control No: **INFO**
Location/Mail Stop: 45
From: ECDC

FOLLOW INSTRUCTIONS BELOW
VARIANCE ON 20300-PSP-0004 R/1

Project	CWO	Document No	Rev	Title of Document	Comments
20300 VARIANCE		20.03.13.06-16	0	PSP FOR EXCAVATION CHARACTERIZATION FOR INACTIVE FLYASH PILE AND SP5	INFORMATION ONLY

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Signature

Date

VARIANCE / FIELD CHANGE NOTICE

2235

V/FCN 20.03.13.06-16

WBS NO.: PROJECT/DOCUMENT 20.03.13.06, ECDC #20300-PSP-0004 Rev1.

Page 1 of 1

PROJECT TITLE: PSP for Excavation Characterization for Inactive Flyash Pile and SP5

Date: 1/12/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

Section 2.8 (Miscellaneous Field Sampling) Variance/Field Change Notice (V/FCN) 20.03.13.06-06 requires documentation of the following field sampling.

The Inactive Flyash Pile (IFP) was excavated to final grade (lift IFP-11) per design drawings, then, scanned with real-time in-situ gamma instruments and sampled using Geoprobe equipment. Based on the data from this characterization, an additional lift (IFP-12) was excavated south of interceptor ditch #2. Subsequent verification of the excavation boundary will consist of real-time scanning for the next potential lift per PSP and also additional physical sampling at the location previously identified as IFP-CC-3 (Northing 477907.7 and Easting 1347516.2).

Soil samples will be taken using a Geoprobe or Geoprobe equipment and will be advanced until the aquifer water table is reached (expected at 517-520 MSL: approximately twenty feet below the current surface). The sampling team will label the Geoprobe core sleeves and lithologically describe each six-inch interval collected. The core location will be identified as IFP-13-3 with each six-inch core interval being subsequently number (i.e. 0-0.5 ft=1, 0.5-1 ft=2, 1-1.5=3, etc). The plastic sleeved cores will be wiped down and radiologically monitored (with any elevated readings noted on the plastic sleeves) out of the controlled area for sample container separation and archiving. When the aquifer water table is reached, water sampling will commence per an Aquifer Restoration and Wastewater Project Specific Plan. (Docum. 52400-PSP-001).

Note: Lithology can be described outside of controlled excavation footprint. 1/12/99

11-13-99
11-13-99

The borehole will be plugged using granular or pelletized bentonite and water for hydration. If borehole collapse occurs, no bentonite will be necessary. Borehole abandonment will be documented on a Borehole Abandonment Log.

The first four feet (intervals IFP-13-3-1 through IFP-13-3-8) of the core sleeve will be containerized (using 500 ml glass or plastic containers) by the sampling team and submitted for total uranium analysis by ICP/MS methodology at ASL B (with MDC < 10 ppm). The lab sample identification will consist of adding the suffix "-R" to the core interval identification (i.e. IFP-13-3-1-R). The remainder of the core will be archived for potential analysis at a later date.

Justification:

1. Section 2.8 allows for the collection of physical samples.

ORIGINAL

REQUESTED BY: Mike Rolfes

DATE: 1/12/99

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>[Signature]</i>	11-13-99	X	PROJECT MANAGER <i>[Signature]</i>	1-13-99
	DATA QUALITY MANAGEMENT			Real-time Program Mgr	
X	ANALYTICAL CUSTOMER SUPPORT <i>[Signature]</i>	1/13/99	X	Characterization Lead <i>[Signature]</i>	1/12/99
X	Sampling Team Manager <i>[Signature]</i>	1/12/99		WAO	
VARIANCE/FCN APPROVED (X)YES ()NO			REVISION REQUIRED: ()YES (X)NO		
DISTRIBUTION INFORMATION ONLY 56					
PROJECT MANAGER:		DOCUMENT CONTROL: Jeannie Rosser		OTHER:	
QUALITY ASSURANCE:		OTHER:		OTHER:	

2235

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL157755
DRAG8938

To: NICKEL, KATHLEEN A

Date: 02/23/99

Control No: NA

Location/Mail Stop: 45

From: ECDC

FOLLOW INSTRUCTIONS BELOW
VARIANCE ON 20710-PSP-0001 R/O

Project	CWO	Document No	Rev	Title of Document	Comments
20710 VARIANCE		50.03.59.01-03	0	LEAD DELINEATION IN THE AREA 1 PHASE II	INFORMATION ONLY

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Signature

Date

TERMINATION OR TRANSFER OCCURS, NOTIFY ECDC PROJECT DOCUMENT CONTROL AT
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57

2235

VARIANCE / FIELD CHANGE NOTICE

V/F 50.03.59.01-3

WBS NO.: 50.03.59.01

Page 1 of 1

PROJECT TITLE: 20710-PSP-0001, Lead Delineation in the Area 1 Phase II Trap, Rev. 0

Date: 2/10/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

Reference: V/F 50.03.59.01-2

This variance documents two changes made in the field during the sampling of treatability study soil at the A1P11 Trap Range. The first change was that additional soil was collected at the highest known sample location, A1P2TRAP-28-1-M. The Stabilization Contractor supplied an additional 3-gallon bucket in which to take additional soil. The second change was that the plastic buckets supplied by the Stabilization Contractor were deemed not amenable to shipping as is. The material was therefore transferred, while still in their polyethylene liners, to two, 5-gallon steel buckets with ratchet-locking lids (similar to that of drums used here onsite.)

Justification:

Additional soil was needed as a backup in case the initial soil characterization in the composite sample bucket did not fail TCLP. Also, the polyethylene buckets supplied by the Stabilization Contractor are not approved shipping containers.

NOTE: Project organization has changed. Approvals for Project Manager is Tony Klimek and for Characterization Lead, Alex Duarte.

REQUESTED BY: Mike Heinen *Mike Heinen* Date: 2/10/99

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>R. Klimek</i>	2-10-99	X	CHARACTERIZATION LEAD <i>Alex Duarte</i>	2/11/99
	DATA QUALITY MANAGEMENT		X	FIELD MANAGER <i>Mike Heinen</i>	2/11/99
	ANALYTICAL CUSTOMER SUPPORT		X	WAO <i>Christa Waller</i>	2/16/99
	OTHER			OTHER	

VARIANCE/FCN APPROVED [X] YES [] NO

REVISION REQUIRED: [] YES [x] NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL:	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

INFORMATION
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58

2235

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL154855
ROSS9966

To: NICKEL, KATHLEEN A Date: 02/03/99
Control No: NA
Location/Mail Stop: 45
From: ECDC

FOLLOW INSTRUCTIONS BELOW
NEW VARIANCE

Project	CWO	Document No	Rev	Title of Document	Comments
20710 VARIANCE		50.03.59.01-3	0	LEAD DELINEATION IN THE AREA 1 PHASE II	INFORMATION ONLY

As a controlled document holder, you are required to destroy any old revisions of this document. Sign and date below, verifying receipt of these documents. **Return this record of receipt to ECDC PROJECT DOCUMENT CONTROL, 52-7.** Return receipt within ten (10) days of transmittal date.

Signature

Date

IF TERMINATION OR TRANSFER OCCURS, NOTIFY ECDC PROJECT DOCUMENT CONTROL AT
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59

2235

VARIANCE / FIELD CHANGE NOTICE

V/F 50.03.59.01-2

WBS NO.: 50.03.59.01

Page 1 of 1

PROJECT TITLE: 20710-PSP-0001, Lead Delineation in the Area 1 Phase II Trap, Rev. 0

Date: 2/1/99

VARIANCE / FIELD CHANGE NOTICE (Include Justification):

This variance documents the process for retrieval of soil from the A1P11 Trap Range for the treatability study. FDF Sample Technicians will collect several 0"-3" composite samples at or near the following sample locations as directed by Stabilization Contractor: (points have already been staked in the field)

Sample IDs	Northing	Easting
A1P2TRAP-28-1-M	1351060	478555
A1P2TRAP-20-1-M	1351007	478692
A1P2TRAP-5S-1-M	1351182	478645

Quantities of material at each location will be at the direction of the Stabilization Contractor. Collect material using either a decontaminated stainless steel coring tube, stainless steel bucket auger or stainless steel trowel. Material will be composited into a 5 gallon decontaminated polypropylene container fitted with a rubber sealed locking lid (supplied by Stabilization Contractor). Sufficient material will be placed into the container to fill it 3/4 full (approx. 35-45 lbs). Decon is not required between sample locations. Rad Tech will provide periodic monitoring of samples placed in bucket.

Container will be labeled as Customer Identification Number FERA1P2TRAPTS and marked as being "Not Homogenized".

Container will be shipped to the following location as Non-Radiological material via the "clean" side of the FEMP Sample Processing Lab:

Waste Stream Technology
302 Grote Street
Buffalo, NY 14207
Phone: (716) 876-5290
Facsimile: (716) 876-2412
Facility Director: Edward Oddo
Treatability Study Director: James Hyzy, Ph.D.

INFORMATION
ONLY

Justification:

These samples are being added in order for Contractor to perform bench-scale testing at their facility to optimize their stabilization treatment mix, as required by Section 2211 of the specifications.

NOTE: Project organization has changed. Approvals for Project Manager is Tony Klimek and for Characterization lead, Alex Duarte.

REQUESTED BY: Mike Heinen *Mike Heinen* Date: 2/1/99

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
	QUALITY ASSURANCE <i>[Signature]</i>	2-1-99	X	CHARACTERIZATION <i>[Signature]</i>	2-1-99
	DATA QUALITY MANAGEMENT		X	FIELD MANAGER <i>Mike Heinen</i>	2-1-99
	ANALYTICAL CUSTOMER SUPPORT		X	WAO <i>Christa Wells</i>	2-3-99
	OTHER			OTHER	

VARIANCE/FCN APPROVED [X] YES [] NO

REVISION REQUIRED: [] YES [X] NO

2235

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL:	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

2235

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL159230
JARR5585

To: NICKEL, KATHLEEN A Date: 03/05/99
Control No: NA
Location/Mail Stop: 45

From: ECDC

FOLLOW INSTRUCTIONS BELOW

APPROVED VARIANCE/ 55200-PSP-0004

Project	CWO	Document No	Rev	Title of Document	Comments
55200 VARIANCE		50.03.59.04-10	0	AREA 1 PHASE II PSP FOR FIELD SAMPLING OF MISCELLANEOUS AREAS	INFORMATION ONLY

As a controlled document holder, you are required to destroy any old revisions of this document. Sign and date below, verifying receipt of these documents. **Return this record of receipt to ECDC PROJECT DOCUMENT CONTROL, 52-7.** Return receipt within ten (10) days of transmittal date.

Signature

Date

42

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VARIANCE / FIELD CHANGE NOTICE

2235

V/F No. 50.03.59.04-9¹⁰

WBS NO.: 50.03.59.04

Page 1 of 1

PROJECT TITLE: A1/PII PSP for Field Sampling of Miscellaneous Areas

Date: 2/26/99

VARIANCE / FIELD CHANGE NOTICE (Include Justification): ECDC# 55200-PSP-0004

Soil samples will be collected at four excavation locations along the OSDF Leachate Conveyance System (LCS) pipeline. There are currently four open excavations due to leak repairs to the pipeline. The pipeline is exposed at the bottom of each excavation. Accumulated rainwater has been pumped from the excavations to allow access for sampling.

The soil samples will be collected from the point at which the pipeline enters the sidewall of the excavation since the soil underlying the leak point has been removed. Samples will be collected using a scoop method and placed directly into the sample containers.

The soil sample identifiers are as follows:

- A1PIIMIS-LCS-1 (Excavation located south of the OSDF decon pad and west of the OSDF change trailer)
- A1PIIMIS-LCS-2 (Excavation located adjacent to the former N. Access Rd. near the West Impacted Soil Pile)
- A1PIIMIS-LCS-3 (Excavation located west of the decon pad)
- A1PIIMIS-LCS-4 (Excavation located east of the RIMIA Bldg. and west of the N. Access Rd.)

At each excavation, the following analyte groups will be sampled:

Radiological (total uranium and Tc-99)	Sample ID suffix: -R	Preservative: None
Metals (Boron and mercury)	Sample ID suffix: -M	Preservative: Cool to 4C
Volatile Organics	Sample ID suffix: -L	Preservative: Cool to 4C
Semivolatile Organics/Pesticides	Sample ID suffix: -S	Preservative: Cool to 4C
TOX and TOC	Sample ID suffix: -T	Preservative: Cool to 4C
Alpha-Beta Screen	Sample ID suffix: -AB	Preservative: None

Refer to the SCQ for sample container requirements.

All sampling and analysis will be performed at ASL B.

One trip blank will be utilized during sampling and analysis. (Sample ID: A1PIIMIS-LCS-TB-L).

Justification:

This expedited sampling program is necessary to determine the impact of the leachate that may have leaked into the soil surrounding the leak point in the pipeline.

**INFORMATION
ONLY**

REQUESTED BY: John Berretz/Alex Duarte

Date: 2/26/99

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>PA Wake</i>	2-26-99		PROJECT MANAGER	
	DATA QUALITY MANAGEMENT		X	FIELD SAMPLING LEAD <i>Mike Furl</i>	2/26/99
X	ANALYTICAL CUSTOMER SUPPORT <i>Sell Whitman</i>	3/3/99	X	CHARACTERIZATION LEAD <i>Carol P. Khub</i>	2/26/99
	OTHER			OTHER <i>for A. Duarte</i>	

VARIANCE/FCN APPROVED [X]YES []NO

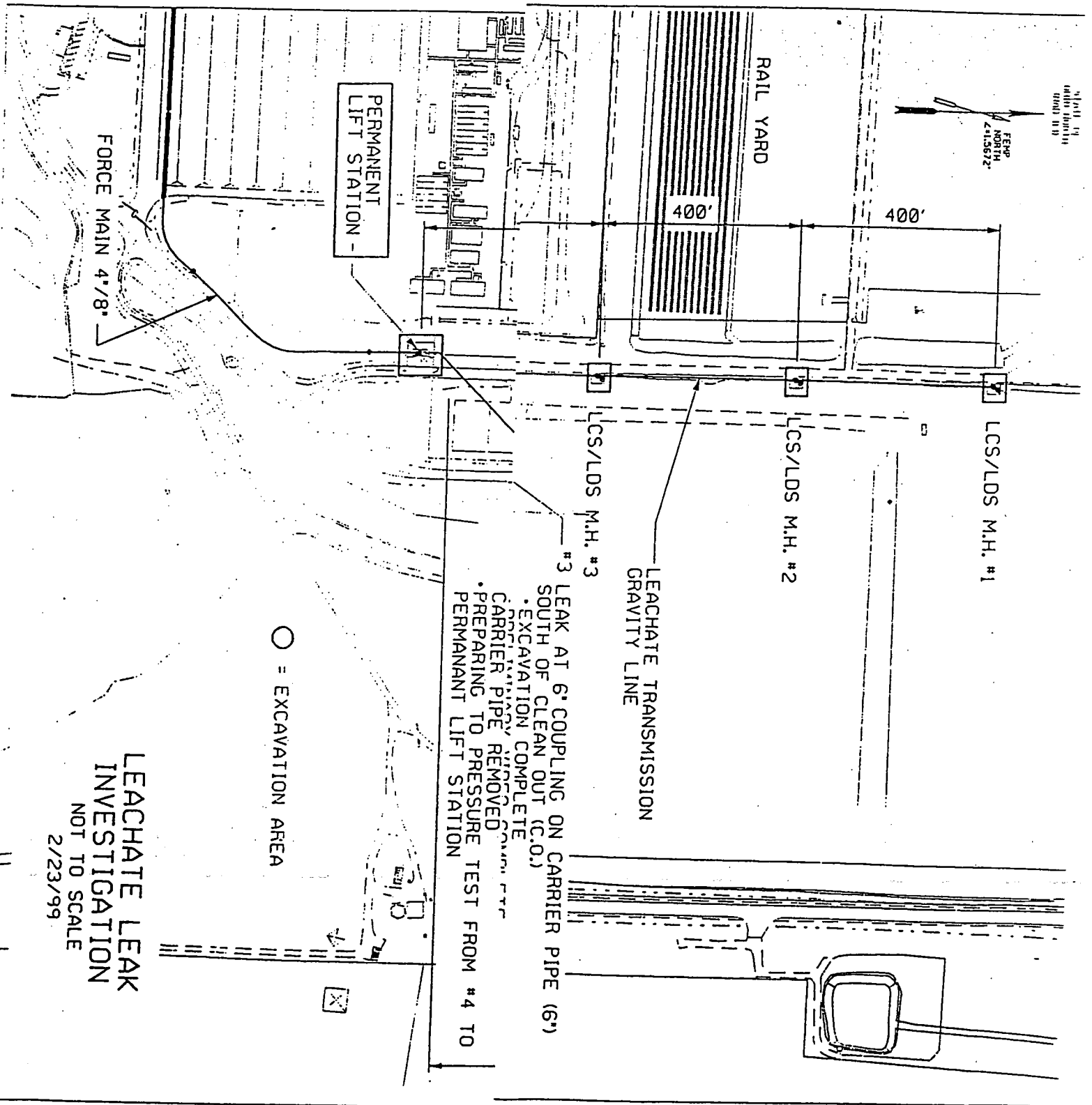
REVISION REQUIRED: []YES [X]NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: JEANIE ROSSER	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:

ORIGINAL**63**

2235



64

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TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL165314
ROSS9966

To: NICKEL, KATHLEEN A Date: 04/16/99
Control No: NA
Location/Mail Stop: 45
From: ECDC

FOLLOW INSTRUCTIONS BELOW

VARIANCE FOR AREA 1 PHASE 11 PSP FOR FIELD SAMPLING OF MISCELLANEOUS

Project	CWO	Document No	Rev	Title of Document	Comments
55200 VARIANCE		50.03.59.04-12	0	AREA 1 PHASE II PSP FOR FIELD SAMPLING OF MISCELLANEOUS AREAS	INFORMATION ONLY

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45

2235

VARIANCE / FIELD CHANGE NOTICE

V/F 50.03.59.04-12

WBS NO.: 50.03.59.04, Document No. 55200-PSP-0004, Rev 0

Page 1 of 3

PROJECT TITLE: A1P2 PSP for Field Sampling of Miscellaneous Areas

Date: 4/14/99

VARIANCE / FIELD CHANGE NOTICE (Include justification):

This variance documents the additional sampling of the sludge cake material in the Sludge Drying Beds.

The sample location will be field located as determined by the Characterization Lead at the time of sample collection. The sample will be taken from the west berm of the east bed with the objective being to collect the sample which represents the mixture of soil and sludge cake material.

The Sample ID will be A1P2MIS-ECARE, and will be analyzed for the following parameters:

Parameter	TAL	Comments
Radiological	A,C,F	Includes Gamma Scan, Tc99, Ra226, Total and Isotopic Th, Total and Isotopic U
TCLP Inorganics and pH	B	RCRA 8 metals plus Zinc
TCLP Organics	D	32 constituents
Reactive Cyanide and Sulfide	G	
PFLT	H	
Total Volatiles	E	
pH	I	

INFORMATION
ONLY

The attached table lists the required volumes for each parameter.

A duplicate sample will not be required. One trip blank and one field blank will be collected and analyzed for Total Volatiles. Analysis and Data Validation will be performed at ASL B.

Justification:

An additional characterization sample is needed to determine if the material meets Envirocare WAC.

REQUESTED BY: JD Chiou

DATE: 4/14/99

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE <i>Frank Thomas</i>	4/14/99	X	PROJECT MANAGER <i>Alex P. Hunt</i>	4-15-99
	DATA QUALITY MANAGEMENT			Real-time Program Mgr	
X	ANALYTICAL CUSTOMER SUPPORT <i>Butt, Whittemore</i>	4/15/99	X	Characterization Lead <i>J. Vance for Alex Duarte</i>	4-15-99
X	Sampling Manager <i>Mike Frank</i>	4/15/99	X	WAG <i>Christa Walls</i>	4-15-99
VARIANCE/FCN APPROVED [X]YES []NO			REVISION REQUIRED: []YES [x]NO		

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46

PROJECT MANAGER:

DOCUMENT CONTROL: Jeannie Rosser

OTHER:

QUALITY ASSURANCE:

OTHER:

OTHER:

2235

Analytical Summary						
Analysis (ASL B)	TAL	Matrix	Lab	Holding Time (Days)	Sample Wt. (wet)	Preservative and Container Type (ml)
Gamma Spec. Scan 30 minute count time	A	Solid	On-site	14	310g	None
Tc-99 Alpha Spec. Total and Isotopic U, Total and Isotopic Th, Ra-226	C	Solid	On-site	14		250 (G or P) ^a
ICP-MS U-235	F	Solid	On-site	14		
TCLP Inorganics + Zn and pH	B	Solid	On-site	14	200g	Cool to 4° C 120 (G or P)
TCLP Organics (VOAs)	D	Solid	Off-site	14	25	Cool to 4° C 2-60 (G)
TCLP Organics (BNA /Herbicide/Pesticide)	D	Solid	Off-site	14	175	Cool to 4° C 120 (G)
Total Volatiles	E	Solid	Off-site	14	25g	Cool to 4° C 2-60 (G)
Total Volatiles (Trip Blank/Field Blank)	E	Liquid	Off-site	14	120 ml	Cool to 4° C pH < 2, HCL 2-40 ml glass with teflon-lined septa
Reactive Cyanide and Sulfide	G	Solid	Off-site	ASAP upon receipt by lab	150g	Cool to 4° C 120 Amber (G)
Paint Filter Test	H	Solid	Off-site	ASAP upon receipt by lab	200g	Cool to 4° C 120 (G or P)
pH	I	Solid	Off-site	ASAP upon receipt by lab	50g	Cool to 4° C 120 (G or P)

G = Glass, P = Plastic

47

TARGET ANALYTE LISTS

TAL A

Gamma Spectrometry Scan: 30-minute count time identification of all peaks using multiple library searches

TAL B

TCLP Inorganics and pH: Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver, Zinc, pH

TAL C

Alpha Spectrometry: Isotopic uranium, Isotopic thorium, Radium-226
Gas Proportional Count: Tc-99

TAL D

TCLP Organics: Endrin, Lindane, Methoxychlor, Toxaphene, 2,4-D, 2,4,5-TP (Silvex), Benzene, Carbon Tetrachloride, Chlordane, Chlorobenzene, Chloroform, o-Cresol, m-Cresol, p-Cresol, Cresol, 1,4-Dichlorobenzene, 1,2-Dichloroethane, 1,1-Dichloroethylene, 2,4-Dinitrotoluene, Heptachlor (and its epoxide), Hexachlorobenzene, Hexachlorobutadiene, Hexachloroethane, Methyl ethyl ketone, Nitrobenzene, Pentachlorophenol, Pyridine, Tetrachloroethylene, Trichloroethylene, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, Vinyl chloride

TAL E

Total Volatiles: Chloromethane, Bromomethane, Vinyl Chloride, Chloroethane, Methylene Chloride, Acetone, Carbon Disulfide, 1,1-Dichloroethene, 1,1-Dichloroethane, 1,2-Dichloroethene (total), Chloroform, 1,2-Dichloroethane, 2-Butanone 1,1,1-Trichloroethane, Carbon Tetrachloride, Bromodichloromethane, 1,2-Dichloropropane, cis-1,3-Dichloropropene, Trichloroethene, Dibromochloromethane, 1,1,2-Trichloroethane, Benzene, trans-1,3-Dichloropropene, Bromoform, 4-Methyl-2-pentanone, 2-Hexanone, Tetrachloroethene, 1,1,2,2-Tetrachloroethane, Toluene, Chlorobenzene, Ethylbenzene, Styrene, Xylenes (total)

TAL F

ICP/MS: Uranium-235 (wt %)

TAL G

Reactive cyanide and sulfide

TAL H

Paint Filter Liquids Test

TAL I

Off-site pH

2235

TRANSMITTAL
ECDC PROJECT DOCUMENT CONTROL164266
SCHW6923

To: NICKEL, K
Control No: INFO
Location/Mail Stop: 45
From: ECDC
Date: 04/08/99

FOLLOW INSTRUCTIONS BELOW

APPROVED DCNS FOR THE AREA I, PHASE II SITE PREPARATION PROJECT

Project	CWO	Document No	Rev	Title of Document	Comments
20711 DCN		20711-021	0	EROSION CONTROL FOR TRAP RANGE DITCHES	
20711 DCN		20711-022	0	STP HAUL ROAD CONSTRUCTION	
20711 DCN		20711-023	0	BERN SOIL COMPACTION REQUIREMENTS	

As a controlled document holder, you are required to destroy any old revisions of this document. Sign and date below, verifying receipt of these documents. **Return this record of receipt to ECDC PROJECT DOCUMENT CONTROL, 52-7.** Return receipt within ten (10) days of transmittal date.

Signature

Date

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IF TERMINATION OR TRANSFER OCCURS, NOTIFY ECDC PROJECT DOCUMENT CONTROL AT
4595

RCI/DCN FORM

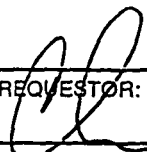

2235

REQUEST FOR CLARIFICATION OF INFORMATION / DESIGN CHANGE NOTICE -

(1) WP / WO NO.: 20711	(2) S/C NO.: FSC 614	(5) Pg 1 OF 1	(6) DATE 3/23/99
(3) S/C TITLE: Area 1, Phase II Site Preparation			(11) RCI NO.:
(4) RESPONSIBLE DISCIPLINE: E <input type="checkbox"/> M <input type="checkbox"/> C X <input type="checkbox"/> OTHER <input type="checkbox"/>	(4A) RCI/DCN TITLE: Erosion Control for Trap Range Ditches		(11) DCN NO.: 20711-021
(7) DOCUMENTS AFFECTED	(7) DOCUMENT NOS.	(7) REV.	(8) OTHER
Technical Drawings	92X-5900-G-00436	0	n/a
(9) <input type="checkbox"/> RCI - INQUIRY <input type="checkbox"/> USQD SCREENING BY PROJECT ENGINEER (9) x DCN - JUSTIFICATION, EXISTING CONDITION & REQUESTED/PROPOSED CHANGE			


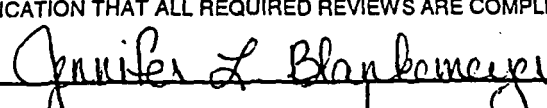
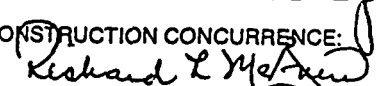
Add a note to Construction Drawing 92X-5900-G-00436, relative to both Trap Range Ditches 1 and 2, stating that for these ditches only, the coir erosion control blanket is not required. All matting placed in these two ditches may consist of the fiber erosion control matting that was approved for use through DCN 20711-014.

INFORMATION ONLY

(10) REQUESTOR:  COMPANY: FDF / JE DATE: 3/23/99 (12) CE / PE:  DATE: 3/23/99
3) RESPONSE: FOR RCI, IS A DCN REQ'D? ☐ NO ☐ YES (14) FOR DCN: ☐ APPROVED ☒ APPROVED AS NOTED ☐ DISAPPROVED

1) See attached comments on page 1 of 1

RCI - DCN ACCEPTANCE

5) DESIGN ORGANIZATION APPROVAL/DISAPPROVAL:  (PERSONS) DATE: 4/2/99		(20) CHARGE NO. FOR CADD SERVICES TO INCORPORATE:	
<input type="checkbox"/> FIT <input checked="" type="checkbox"/> FORM <input type="checkbox"/> FUNCTION			
6) FDF PE ACCEPTANCE & VERIFICATION THAT ALL REQUIRED REVIEWS ARE COMPLETE: (DCN ONLY) DATE:			
PERFORMANCE GRADE: (17) 5 		4/10/99	
7) CONSTRUCTION CONCURRENCE:  DATE: 4-7-99		(21) WORK COMPLETED: (SIGNOFF BY CE OR PE) DATE:	
PURCHASE REQUISITION REQUIRED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO (19)		70	

1 April, 1999

2235

A1PII Site Preparation
20711 / TO P-015

DCN NO.; 20711-021
TITLE: Erosion Control for Trap Range Ditches

Documents Affected

Drawing No. 92X-5900-G-00469

Civil Comments are as follows:

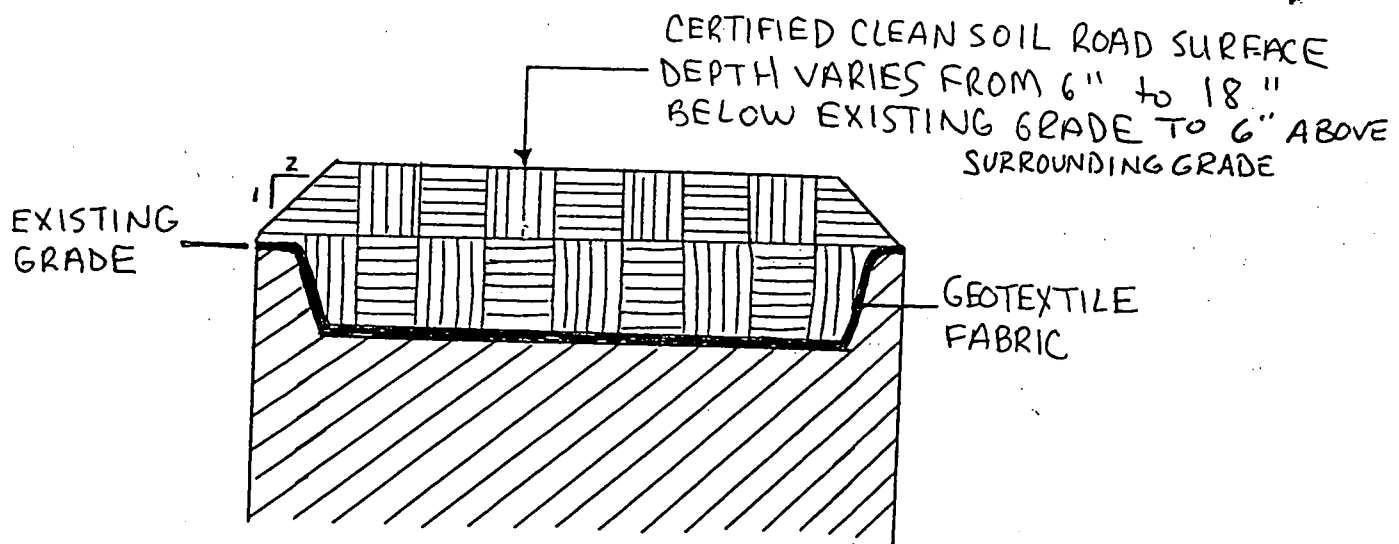
1. No exception taken to the proposed modification. Drawing No. 92X-5900-G-00436 will not be affected by this DCN.
2. Detail No. 1 on drawing no. 92X-5900-G-00469 will be modified during the next package update. The erosion control blanket in detail 1 will be identified as "North American Green C125BN or equal as noted in spec section 02270 part 2) as was approved through DCN No. 20711-014.

71

REQUEST FOR CLARIFICATION OF INFORMATION / DESIGN CHANGE NOTICE -

(1) WP / WO NO.: 20711		(2) S/C NO.: 614		(5) Pg 1 of 1		(6) DATE: 3/30/99	
(3) S/C TITLE: Area I Phase II Site Preparation				(4) RESPONSIBLE DISCIPLINE: <input type="checkbox"/> E <input type="checkbox"/> M <input checked="" type="checkbox"/> C <input type="checkbox"/> OTHER			
(4A) RC/DCN/TITLE: STP Haul Road Construction				(7) DOCUMENTS AFFECTED: 20711-022			
(11) RC/DCN NO.: RC/20711-011R		(11) DCN NO.: 20711-022		(7) REV. (8) OTHER		0	
(9) DCN-JUSTIFICATION, EXISTING CONDITION & REQUESTED/PROPOSED CHANGE		DCN No. 20711-003		Chris Mumford		m/c pr	
<p>Sketch 2 attached to DCN 20711-003 specifies that the STP Haul Road be constructed by placing geotextile on existing grade and then placing 6" of certified soil as a road surface.</p> <p>Petro Environmental has stripped the vegetation and topsoil over the proposed road location to depths ranging from 6" to 18" below grade. Petro would like to construct the STP Haul Road on a new grade that resulted from stripping. A proposed design sketch is attached. Please provide comments.</p> <p>Additionally, please provide a location for the disposition of uncertified topsoil and vegetation which has been stripped from the STP Haul Road corridor and is currently stockpiled in that area.</p>		INFORMATION ONLY		3/31/99		DATE: (12) FCE / PE	
REQUESTOR: Charles B. Locke		COMPANY: Charles B. Locke		DATE: 4/1/99		DATE: 4/1/99	
RESPONSE FOR RCI, IS A DCN REQ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		(14) FOR DCN: <input type="checkbox"/> APPROVED <input checked="" type="checkbox"/> DISAPPROVED		1) See attached comments page 1 of 1		2) See attached sketch 1 of 1	
DESIGN ORGANIZATION APPROVAL: Carleton Schroeder (Parsons)		DATE: 4/5/99		RCI - DCN ACCEPTANCE		DATE: 4/10/99	
DE FE ACCEPTANCE & VERIFICATION THAT ALL REQUIRED REVIEW ARE COMPLETE: (DCN ONLY)		DATE: 4/10/99		CONSTRUCTION CONCURRENCE: Robert L. Mumford		DATE: 4/10/99	
HASE REQUISITION REQUIRED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO (19)		72					

2235



RCI-20711-011R

SKETCH 1 of 1 73

2235

2 April, 1999

A1P11 Site Preparation
20711 / TO P-015

RCI NO.; 20711-011R
TITLE: STP Haul Road Construction

Documents Affected

DCN No. 20711-003

Civil Comments are as follows:

1. No exception taken to the proposed modification. A simple DCN is required to incorporate the requested change into the sketch attached to DCN No. 20711-003.
2. The uncertified topsoil and vegetation, which has been stripped from the STP Haul Road, shall be disposed of in a location designated by the FDF Construction Manager. The uncertified excavated material shall be hauled and stockpiled in accordance with the specification section 02100. Erosion and sediment control measures shall be provided in accordance with the specification section 02270.

2235

REQUEST FOR CLARIFICATION OF INFORMATION / DESIGN CHANGE NOTICE -

1) WP / WO NO.: 20711		(2) S/C NO.: 614		(5) Pg 1 of 1	(6) DATE 3/30/99
3) S/C TITLE: Area 1 Phase II Site Preparation				(11) RCI NO.: RCI-20711-012R	
4) RESPONSIBLE DISCIPLINE: E <input checked="" type="checkbox"/> M <input type="checkbox"/> C <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		(4A) RCI/DCN/TITLE: Berm Soil Compaction Requirements		(11) DCN NO.: 20711-023	
(7) DOCUMENTS AFFECTED Construction Drawing G0013 Detail 1&2		(7) DOCUMENT NOS. 92X-5900-G-00469		(7) REV. 0	(8) OTHER

☒ RCI - INQUIRY ☐ USQD SCREENING BY PROJECT ENGINEER

☐ DCN - JUSTIFICATION, EXISTING CONDITION & REQUESTED/PROPOSED CHANGE

Construction Drawings which show how the Conveyances Channel, Trap Range Ditches, and associated berms are constructed indicate that the berms are "compacted fill." This would require that the berms be placed in 8" lifts and soil compaction testing be performed as specified in Section 02206. Petro will construct the berms by placing and compacting the material with tracked construction equipment. Petro requests that compaction testing requirements be waived for the berms.

compaction requirements cannot be waived, can existing compacted fill requirements be amended from one density test per 10,000 sq. ft. per lift to one density test per 100 linear feet per lift?

REQUESTOR: Chris Tucker COMPANY: Petro Environmental Technologies, Inc.

DATE: (12) FCE / PE

DATE:

RESPONSE FOR RCI, IS A DCN REQ'D ☐ NO ☒ YES

(14) FOR DCN: ☐ APPROVED ☒ APPROVED AS NOTED ☐ DISAPPROVED

1) See attached comments (Page 1 of 1)

INFORMATION ONLY

RCI - DCN ACCEPTANCE

DESIGN ORGANIZATION APPROVAL:

DATE: (20) CHARGE NO. FOR CADD SERVICES TO INCORPORATE

Wilton Schroeder (Parsons)

OF PE ACCEPTANCE & VERIFICATION THAT ALL REQUIRED REVIEW ARE COMPLETE: (DCN ONLY)

DATE:

PERFORMANCE GRADE: (17) 5

Junifer Blankmeyer

4/6/99

INSTRUCTION CONCURRENCE:

Richard L. McNamee

(21) WORK COMPLETED: (SIGNOFF BY FCE OR PE)

DATE:

BASE REQUISITION REQUIRED: ☒ YES ☐ NO (19)

4/6/99

75

The density testing will be waived for the compacted fill berms of details 1 and 2 of drawing 92X-5900-G-00469. The following note will be added to the details for compaction of the compacted fill berms:

"The contractor has the following options for compaction of the compacted fill berms, and in each option creeping or displacement of fill material shall not be visible:

- Compact berms by moving of the hauling and spreading equipment so that the entire surface of each lift shall be traversed by not less than one track of the equipment.
- Compact berms by a minimum of four passes of a rubber tired or vibratory roller.
- The contractor shall proof roll berms in accordance with ODOT Item 203.14, as directed by the FDF Construction Manager.